



CONSOLIDATING AMC'S CONTINGENCY RESPONSE CAPABILITIES:  
A DELPHI STUDY

**GRADUATE RESEARCH PAPER**

June 2015

Brad P. Bowyer, Major, USAF

AFIT- ENS-GRP-15-J-026

**DEPARTMENT OF THE AIR FORCE  
AIR UNIVERSITY**

***AIR FORCE INSTITUTE OF TECHNOLOGY***

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**Wright-Patterson Air Force Base, Ohio**

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GRADUATE RESEARCH PAPER

Presented to the Faculty

Department of Operational Sciences

Graduate School of Engineering and Management

Air Force Institute of Technology

Air University

Air Education and Training Command

In Partial Fulfillment of the Requirements for the

Degree of Master of Science in Logistics

Brad P. Bowyer, BS, MA

Major, USAF

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Brad P. Bowyer, BS, MA

Major, USAF

Committee Membership:

Lt Col Joe Huscroft  
Chair (Primary Research Advisor)

## **Abstract**

This research examined the proposed divestiture of the Contingency Response Wing (CRW) and the resultant consolidation of Air Mobility Command's (AMC) Contingency Response Groups (CRGs) into either an Air Mobility Wing (AMW), the Air Reserve Component (ARC), or an Air Mobility Operations Wing (AMOW). The research used a Delphi Study of 15 Contingency Response (CR) experts. These CR experts consisted of current and former commanders at the squadron and group level. The panel provided knowledge and insight into the possible advantages and disadvantages of these potential organizational changes.

This study concluded that the current construct of the CRW is the most effective organizational structure for the CRGs; however, a very clear alternative exists in the potential consolidation of the CRGs into an AMW. This organizational structure could potentially reduce the effectiveness of CR units; however, efficiencies could be gained in several key areas.

*To my family, your continued support throughout the rigors of the academic year enabled the successful completion of this research project. Your time and dedication serves as a reminder of the sacrifices our military families make in honor of our service.*

## **Acknowledgments**

I would like to thank several contributors to the successful completion of this research. Thank you to the commanders within the CRW who not only served as a key component of this research process, but also as mentors during my assignment in the CRW. Your knowledge of CR operations and organizational structure has proven invaluable to this study. Thanks to Ms. Pamela Bennetbardot for your continued efforts to support the classes' research efforts and always doing so with cheer and excitement. Thank you to Lt Col Joe Huscroft for your knowledge and enthusiasm of the Delphi Study processes and your continued support throughout my research. I would also like to extend my greatest appreciation to Ms. Kim Corcoran, Director of Staff at the United States Air Force Expeditionary Center (USAF EC), who provided mentorship and invaluable guidance.

Maj Brad P. Bowyer

## Table of Contents

	Page
Abstract .....	iii
Acknowledgments.....	v
Table of Contents .....	vi
List of Figures .....	viii
List of Tables .....	ix
List of Equations .....	xi
I. Introduction .....	1
General Issue .....	1
Problem Statement .....	6
Research Objectives .....	6
Investigative Questions .....	6
<i>Primary Research Question</i> .....	6
<i>Sub-questions</i> .....	6
Research Focus.....	7
Methodology .....	7
Assumptions/Limitations .....	7
Implications.....	8
II. Literature Review .....	9
Chapter Overview .....	9
DoD Policy/Guidance (CRF Purpose and CRF Requirements).....	9
Past Organization/History .....	10
Current Organization.....	15
Reorganization Plans.....	18
Previous CRG Structure Research .....	19
Summary .....	20
III. Methodology .....	21
Chapter Overview .....	21
Delphi Technique .....	21
Likert Scale .....	23
Kendall's Ws.....	24
Panel Selection .....	25
Round One Questionnaire .....	26

Round Two Questionnaire .....	28
Round Three Questionnaire .....	30
Summary .....	32
IV. Analysis and Results .....	33
Chapter Overview .....	33
Question 1 .....	33
Question 2 .....	35
Question 3 .....	36
Question 4 .....	38
Question 5 .....	39
Question 6 .....	41
Question 7 .....	43
Question 8 .....	45
Question 9 .....	47
Question 10 .....	48
Question 11 .....	49
Summary .....	51
V. Conclusions and Recommendations .....	52
Chapter Overview .....	52
Summary of Research .....	52
Significance of Research.....	54
Research Limitations.....	55
Recommendations for Future Research .....	57
Conclusion .....	58
Glossary of Technical Terms .....	60
Appendix A. Round One Questionnaire .....	61
Appendix B. Round Two Questionnaire.....	63
Appendix C. Round Three Questionnaire.....	74
Appendix D. AFIT Human Subjects Exemption Approval .....	85
Appendix E. AFIT Quad Chart.....	87
Bibliography .....	88

## **List of Figures**

	Page
Figure 1: Global CRG Laydown (Turain, 2015) .....	1
Figure 2: Representative AMOG Organization in 1994 (Floyd, 1994) .....	12
Figure 3: Representative AMOG in 1997 (Boyd, 2005).....	13
Figure 4: 621 CRW Organization Chart (CRW/CCE, 2014) .....	16
Figure 5: 18 AF/USAF EC OPCON/ADCON Chart (CRW/CCE, 2014) .....	16
Figure 6: 36 CRG Organization Chart (Shrier, 2013).....	17
Figure 7: 435 CRG Organization Chart (Shrier, 2013).....	17
Figure 8: 621 CRW Reorganization Proposal (621 CRW/CCE, 2014).....	19

## List of Tables

	Page
Table 1: Kendall's W Interpretation .....	25
Table 2: Round One Participation.....	27
Table 3: Round Two Participation.....	30
Table 4: Round Three Participation.....	32
Table 5: Question 1 Results .....	33
Table 6: Question 1 East Coast Results .....	34
Table 7: Question 1 West Coast Results.....	34
Table 8: Question 1 Former CC Results .....	35
Table 9: Question 1 Current CC Results.....	35
Table 10: Question 2 Results .....	35
Table 11: Question 3 Results .....	36
Table 12: Question 3 East Coast Results .....	37
Table 13: Question 3 West Coast Results.....	37
Table 14: Question 3 Former CC Results .....	37
Table 15: Question 3 Current CC Results.....	38
Table 16: Question 4 Results .....	38
Table 17: Question 5 AMW Results .....	39
Table 18: Question 5 ARC Results.....	40
Table 19: Question 5 AMOW Results .....	40
Table 20: Question 6 AMW Results .....	41
Table 21: Question 6 ARC Results.....	42
Table 22: Question 6 AMOW Results .....	42

Table 23: Question 7 AMW Results .....	43
Table 24: Question 7 ARC Results .....	44
Table 25: Question 7 AMOW Results .....	44
Table 26: Question 8 AMW Results .....	45
Table 27: Question 8 ARC Results .....	46
Table 28: Question 8 AMOW Results .....	46
Table 29: Question 9 AMW Results .....	47
Table 30: Question 9 ARC Results .....	47
Table 31: Question 9 AMOW Results .....	48
Table 32: Question 10 Results .....	49
Table 33: Question 11 Results .....	50
Table 34: Question 11 East Coast Results .....	50
Table 35: Question 11 West Coast Results .....	50
Table 36: Question 11 Former CC Results .....	51
Table 37: Question 11 Current CC Results .....	51

## List of Equations

	Page
$R_i$ Equation.....	24
$\bar{R}$ Equation .....	24
$R$ Equation .....	24
Kendall's $W$ Equation .....	25

# CONSOLIDATING AMC'S CONTINGENCY RESPONSE CAPABILITIES: A DELPHI STUDY

## I. Introduction

### General Issue

Air Mobility Command's Contingency Response Wing previously existed as two separate wings at Travis Air Force Base (AFB) and at Joint Base McGuire-Dix-Lakehurst (JB-MDL). Due to force structure changes, the Air Force consolidated the two wings into one wing with the wing commander and staff located at JB-MDL. This construct, when combined with the complicated nature of Contingency Response (CR) missions, presents the possibility for inefficiencies and other negative impacts to mission success. The researcher spent two years in the CRW and observed the fact that CRW Airmen do not conduct their core competency on a daily basis and rely on exercises and missions for task proficiency.



Figure 1: Global CRG Laydown (Turain, 2015)

A recent analysis conducted by a squadron commander in the 621 CRW reviewed the utilization of specific Air Force Specialty Codes (AFSCs) during the time period from 1 May 2011 to 25 November 2013. This analysis reviewed all personnel or equipment sent off station for either a training or an operational mission. During this time period a total of 1,010 events occurred with an additional 214 events cancelled prior to mission execution (GMRS/CC, 2013). Of these 1,010 events, the Joint Task Force Port Opening (JTF-PO) alert is counted as a CRG-level event occurring once every four months. Furthermore, as of this data collection ending in November 2013, the JTF-PO alert had never been utilized for an operational mission (GMRS/CC, 2013).

Additional analysis showed 47% of CRW missions were used for training and exercises versus operational missions. These training and exercise missions were often limited in scope and pared down due to lack of airlift availability, training environment limitations, or available funds. Resultantly, the CRG was rarely able to exercise its full mission capability and a large portion of CRG AFSCs were underutilized in these training scenarios.

An analysis of the operational employment of the CR forces revealed a disparity between the various AFSCs. Of these tasked CR missions, 94% were Aerial Port taskings that do not employ any of the other 28 AFSCs from the CRG. In contrast, the CRG's Security Forces personnel, approximately 27 members in each of the four CRGs, were only utilized on 0.59% of the missions tasked during this time period (GMRS/CC, 2013). The utilization rate of the other CRG AFSCs varied, but remained very low when compared to the Aerial Port utilization rate. Additionally, large teams such as Contingency Response Elements (CREs) or CRGs were rarely employed with a utilization rate of just 2.68% (GMRS/CC, 2013). This lack of functional employment has a potential to reduce morale,

readiness, and future manning as Airmen are not able to perform their core competencies on a regular basis.

This negative impact can be hard to quantify and is often more anecdotal in nature. A recent analysis of one of the four Global Mobility Readiness Squadrons (GMRS) presented some quantitative measures of these negative impacts. The GMRS is responsible for the majority of the Base Operating Support (BOS) functions in the CRG and contains 26 different AFSCs. Recently this unit suffered from over 25% of its personnel separating for various reasons resulting in an annual low of 52% manning (GMRS/CC, 2013). In contrast to these personnel vacancies, almost 40% of the unit's personnel had been on station for 4-15 years. The combination of vacant positions and the potential of stagnant manning creates complex internal challenges for the unit commander.

The CRW also suffers from continuous turnover of its officer corps as the majority of the officers in the CRW are either commanders or members of AMC's PHOENIX MOBILITY program. The commanders normally PCS within two years whereas the PHOENIX MOBILITY Officers are assigned to the CRW for 2-3 years, but are intended to transition between units as a career broadening experience. This high turnover rate for commanders and other officers may present an organizational challenge to the efficiency of the CRW.

In contrast to this previous data, the CRW has been more active in the last year than any time in recent history. Units have deployed for larger scale operations such as missions in Iraq to support the efforts against the Islamic State of the Levant (ISIL) as well as two JTF-PO missions to Africa in support of Operation UNITED ASSISTANCE, the international response to contain the Ebola epidemic (US Transportation Command, 2014). Though JTF-PO forces have been used in prior operations, 2014 marked the first time JTF-PO forces were

launched from alert in its nine-year history (Gonzalez, 2014). Employing the alert forces was a major step forward in the operational utility of the JTF-PO; however, deployed teams were much smaller than the actual alert capability. The launch of the 817 CRG to Iraq only used 20 Air Force members of the approximately 140-member JTF-PO alert force (CRE/DO, 2015). The deployment of the 817 CRG to Liberia also underutilized its full capacity as only 79 Airmen and 10 Soldiers of the 140-member JTF-PO alert force deployed (Gonzalez, 2014). The launch of the 123 ANG CRG was a major success for the CR enterprise; however, the unit was not launched off of alert and it required low levels of active duty augmentation for civil engineering, contracting, and security forces resources (Turain, 2015). The use of the JTF-PO alert and the rapid deployment capabilities were ground breaking and exhilarating for members in the CRW; however, the costs of the alert, the readiness cycle, and the organization as a whole should be reviewed to determine if alternate organizational structures could balance the effectiveness and efficiency gaps.

Additional graduate research conducted by Major Ryan Durham investigated the appropriate sizing of the CRGs. This analysis did not incorporate the use of operational plans to justify manning, but rather reviewed the historical use of the CR units and the various functional capabilities. This analysis concluded that the CRW as whole was over manned by 26 aerial porters (~7%), 20 command and control personnel (~8%), and 61 maintainers (~38%) (Durham, 2014). Officially changing these personnel numbers would ultimately affect the CRW's ability to support operational plans which are used to determine the unit's personnel numbers. Due to the insurance-like nature of the CR units, there may be alternate ways to organize the number of required Airmen while using in-garrison personnel more efficiently.

In 2013, a team of Subject Matter Experts (SMEs) from the 621 CRW and the USAF EC conducted an analysis on potential reorganization plans for the CRW. This team of SMEs analyzed the organization of the CRW to determine if increased efficiencies could be achieved by internally reorganizing the units within the CRW. The resulting reorganization is currently being implemented throughout 2015 and is discussed further in Chapter II. This structure is expected to provide improvements to both efficiency and effectiveness, but it is this researcher's opinion that enhanced research examining potential external reorganization would have improved the validity of the reorganization plan.

Additionally, in 2014 the Chief of Staff of the Air Force (CSAF), General Mark Welsh, announced a thorough review of Air Force structure with the purpose of finding better ways to operate under limited budgets. This review is being accomplished by the Total Force Continuum (TFC), which is now a permanent office responsible for making "recommendations on matters of force structure between the active, guard, and reserve components" (Mehta, 2014). The TFC was directed to take a high-velocity approach to the analysis so the recommendations could be implemented in the FY16 budget. This analysis includes a 90-day review of individual weapon systems as well as individual skill sets (Mehta, 2014). Gen Welsh anticipated 80% of the analysis would be completed by the end of 2014 as to better implement force structure balancing for the FY16 budget. Though the analysis is currently incomplete, it serves as an expedient but necessary process to improve the way the USAF balances mission performance in a fiscally constrained environment. Unfortunately, the expedience of this review may leave several missions or units vulnerable to unanticipated structure changes without time to properly analyze the consequences of these changes.

## **Problem Statement**

The AMC CRGs may not be currently organized in the most efficient or effective manner and may be able to reorganize while maintaining operational capabilities in response to future fiscal constraints. This research analyzed the current organization of the active duty (AD) AMC CRGs, collected expert opinions on the effectiveness of the current organization, and explored the possibility of reorganizing the AMC CRGs into an AMW, the ARC, or an AMOW.

## **Research Objectives**

The objective of this research was to qualitatively evaluate the current organization of the CRGs via expert opinions and explore the potential outcomes of divesting the CRW at the wing level and combining CRGs into other organizational structures. This research accepted the assumption that contingency response forces are required to accomplish the mission of AMC. The intent of this research was to analyze potential advantages and disadvantages of combining CRGs into other organizational structures.

## **Investigative Questions**

### ***Primary Research Question***

- Should the Air Force consolidate AD AMC CRGs into alternative organizations and resultantly divest the wing-level organization of the CRW?

### ***Sub-questions***

- What are the advantages of a CRW as a distinct organization?
- What are the potential advantages of the consolidation?
- What are the potential disadvantages of the consolidation?

- What factors should be considered as senior leaders evaluate potential consolidation?

## **Research Focus**

This research focused on the reorganization of AMC CR forces only and did not include the PACAF/USAFE CRGs. The PACAF/USAFE CRGs already exist as a group within a non-CR wing versus existing as a standalone CR wing like the AMC structure.

## **Methodology**

This research used a Delphi study to collect and analyze the expert opinions of AMC CR subject matter experts. Due to time constraints and previous Delphi examples for similar research, three rounds of analysis were used. The first round of questions consisted of open-ended questions designed to capture the expert opinions of the panel as it relates to the primary research question. The researcher then consolidated the findings to generate the second round of questions. This second round asked the experts to analyze and evaluate the answers to the first round using a Likert Scale. The final round presented all panel members with the cumulative results of the panel's previous responses and allowed the respondents to change their answers if applicable.

## **Assumptions/Limitations**

This study was conducted based off the current organizational structure of the CRW during the research period versus the structure of the pending reorganization. Due the significance and diversity of the Global Reach mission, this research assumes that AMC will maintain its span of control over the current CR capabilities, thus the research does not investigate any potential plan to transfer CR capability to the USAFE/PACAF CRGs or reducing the deployed CR capabilities of AMC.

## **Implications**

This research informs senior leaders about the most optimal organization of AMC CR units and provides insight into the potential impacts of changes to CR structure. Analyzing the opinions of CR experts and highlighting potential impacts to efficiency, redundancy, or effectiveness serves as evidence needed to make informed organizational decisions and to mitigate the risks associated with any potential reorganized structures. It also provides the AMC staff and CRW leadership with an analysis of the current performance of the wing structure.

## **II. Literature Review**

### **Chapter Overview**

This chapter provides background information about several of the key issues effecting this research and the issue of properly structuring the AMC CRGs in today's Air Force. It examines current Department of Defense (DoD) policy/guidance, past organization of Contingency Response (CR) units, the current organization of active duty CR units, and the current 621 CRW reorganization proposal. Finally, this chapter reviews previous CR research as it pertains to the organization and composition of the units. This review highlights the robust history of and requirement for CR units while laying the groundwork for the research analysis conducted in Chapter IV.

### **DoD Policy/Guidance (CRF Purpose and CRF Requirements)**

The concept of operations for CR forces evolved dramatically as Air Force doctrine and technologies changed. The lessons learned from expeditionary operations and base opening missions created a plethora of knowledge during the most recent wartime operations in Iraq and Afghanistan. Resultantly, CR policy, guidance, and organization changed rapidly with the lessons learned.

Current Joint Policy describes the CRG as an organization capable of deploying in order to "secure, assess, open, and initially operate airbases" for the Combatant Commander (Goldfein, 2013). These forces are trained and equipped to assess and provide security, establish initial Command and Control (C2), and operate the initial stages of the air mobility operation for all users including USAF, sister services, or multinational forces (Goldfein, 2013). The CRG is a tailorable asset that provides the three core Global Air Mobility Support System (GAMSS) functions in a deployed environment: C2, aerial port, and maintenance.

Additionally, the CRG can be tasked to provide other Base Operating Support functions: weather, civil engineering, security forces, medical, contracting, finance, communications, logistics, and airfield operations (Goldfein, 2013). General Dempsey's Capstone Concept for Joint Operations: Joint Force 2020 highlights the need for globally integrated operations based upon global agility (Staff, 2012). CR forces leverage this global agility through rapid expeditionary basing, nimble C2, and the ability of forces to "aggregate, reconfigure, and disaggregate as required" (Staff, 2012). This amazing breadth of core function capability combined with the ability to rapidly deploy, indicate why CR forces are so fundamental to the Air Force's current and future missions.

### **Past Organization/History**

The legacy of rapidly deployable air support units dates back to the Berlin Airlift. Veterans of the "Hump" missions and Normandy build up, brought their forward-deployed logistics to the newly formed Air Force in 1947 (Boyd, 2005). Their capabilities and experiences were irreplaceable as the Air Force began relief missions in support of blockaded Berlin less than 24 hours after the President's orders (Boyd, 2005). These professional Airmen codified the significance of rapid global mobility support and proved to be the genesis of a rapidly expanding skillset. As the mission of the Air Force and the role of Mobility Air Forces (MAF) continued to evolve so did the role, organization, and capability of CR forces.

In July of 1975, CR units were officially named Airlift Control Elements (ALCE) designed to "organize airlift support at places where support was nonexistent or very limited" (Bossert, 2002). These ALCE units were often deployed with the support of personnel from other units such as mobile aerial port squadrons, airlift control squadrons, and maintenance squadrons (Boyd, 2005). The deployed commanders, members of the ALCE, often found

themselves in charge of a large group of unfamiliar people. Additionally, the commander was not aware of individual skill levels or responsible for personnel's readiness and training. The initial portion of an operation was centered on building an effective team, which "often resulted in haphazard operations" lasting days and sometimes weeks before forming an effective team (Boyd, 2005). Matters were complicated even further, as most of the equipment was sourced piecemeal from other organizations. The deployed personnel may not have trained on a specific version or model of equipment they received. The ALCE personnel overcame many challenges and continued to highlight its utility and capability in the deployed environment as the Air Force began broadening the roles and capabilities of these valuable resources.

The Air Force underwent many organizational and structural changes in the early 1990s. With the advent of Air Mobility Command and the standup of the Tanker Airlift Control Center (TACC) in 1992, leaders began looking for the best way to organize mobility forces while still providing world-class support (Boyd, 2005). In 1994, two in-garrison Air Mobility Operations Groups (AMOGs) were constituted with the ability to deploy Tanker Airlift Control Elements (TALCEs) and Mission Support Teams (MSTs) (Boyd, 2005). These deployable units were designed to implement the Global Reach Laydown (GRL) strategy as defined by General Ronald Fogleman, the Commander of AMC. The GRL called for mobility forces to "rapidly establish AMC presence and infrastructure where none existed or to expand the fixed portion of the enroute system to support increased air mobility operations" (Cook, 2002). This strategy set the stage for the future organization and capabilities of the AMOGs.

The AMOGs were located at Travis Air Force Base and McGuire Air Force Base. The TALCE capabilities housed in the AMOG were again constructed to rapidly deploy

within 12 hours of notification and provide the basic mobility functions of C2, aerial port, and maintenance (Stoff, 2001). The AMOGs were developed to fix some of the problems of the ALCE organization and employment while providing the Air Force with a “professional, focused, and tailored mobility group which could assemble and equip expert packages for austere or temporary air mobility bases” (Boyd, 2005). The AMOG structure provided a focused organization to provide C2, aerial port, and maintenance. The AMOG personnel could train together as a unit, ensure proper readiness, and maintain their own equipment. Thus the AMOG structure provided a fix for many of the shortcomings of the ALCE concept.

Unfortunately, the AMOGs were still not optimally organized. As shown in Figure 2, the groups were designed organizationally versus functionally. The group consisted of five squadrons each focused on a certain mission set within the group. Though the group provided a central node for the CR mission, the squadrons were still functionally stove piped.

In addition to the divisive organization of the group, the design also omitted the additional Base Operating Support functions needed in a deployed environment. The TALCE relied on special experience identifiers and other base units to reinforce the core mission of air mobility support when other functions such as security forces, contracting, or finance were required (Stoff, 2001). Though the initial design of the AMOG was not optimal it was an important stepping stone in the development of modern CR capabilities and organizations.

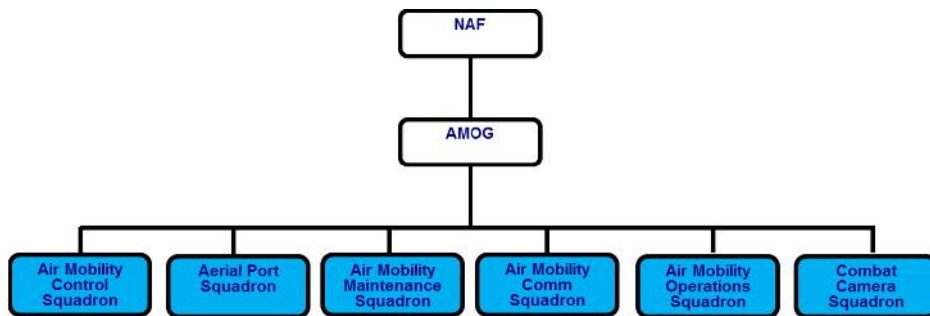
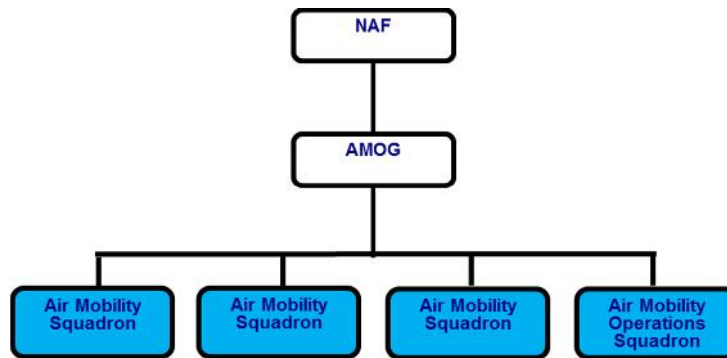


Figure 2: Representative AMOG Organization in 1994 (Floyd, 1994)

Air Mobility Command and AMOG leadership realized the initial structure and design of the AMOG needed improvement. In 1997, the AMOGs conducted an internal reorganization to better align the deployed mission set with the in-garrison organization (Boyd, 2005). Personnel were reorganized from five skillset-focused units to three functionally-organized units represented in Figure 3.



**Figure 3: Representative AMOG in 1997 (Boyd, 2005)**

AMOG leadership touted this reorganization as a way to “improve the way [they] do business” by combining personnel from operations, communications, maintenance, and aerial port along with the necessary tools and equipment in a single unit (Boyd, 2005). This reorganization attempted to provide a synergy that would act as a “force multiplier—everyone will know and understand each other’s job and how the individuals fit together to make an effective team” (Boyd, 2005). The reorganization was undeniably another development enhancing Air Mobility Command’s CR capabilities, but the lack of BOS support still hampered the AMOG’s ability to conduct comprehensive airbase opening and enroute support.

These initial AMOG structures did not provide confidence to the theater commanders that Air Mobility Command could provide a single source of proper contingency support. The inability to train and deploy as a coherent unit combined with other sources of organizational churn to feed a perceived lack of responsiveness. This perception led Pacific

Air Forces and United States Air Forces in Europe to create CR units focused on their theater missions (Stoff, 2001).

These new theater CRGs proved to be an impetus in the evolution of AMC's CR forces. The theater CRGs were designed as discrete units capable of conducting operations beyond that of the AMC TALCE. The theater CRGs deployed as a "recognizable unit" with "members cross-trained in multiple disciplines" capable of responding to the theater commander's needs by rapidly opening an airbase and conducting core functions of the GAMSS for short periods of time (Stoff, 2001). The robust capability of the theater CRGs combined with further transition in the mobility forces set the ground work for the future development of an AMC CRG (United States Air Force, 2004).

This development began when AMC highlighted the need for expanded capabilities as well as the need for contingency response standardization. Before the creation of the AMC CRGs, the two theater CRGs and the AMOGs had vastly different personnel numbers, functional capabilities, and operational concepts. AMC noted that these "distinct and individual efforts compromise the ability of the Air Force to provide a consistent, robust airbase opening capability to the Joint Force Commander" (United States Air Force, 2004). The intent to create AMC CRGs along with the publishing of the CRG Concepts of Operation (CONOPs) and the Global Mobility CONOPs defined a standard playbook of Force Modules and force capabilities for expeditionary air base opening (United States Air Force, 2004). These AF CONOPs solidified the role of CR forces in the Joint Doctrine for expeditionary airbase opening and agile mobility forces, thus solidifying the need to develop an all-encompassing structure for the AMC CRGs.

In 2003 AMC underwent several key changes in force structure. In an attempt to create a more forward leaning and agile mobility force, AMC transitioned from the 21 AF and

15 AF design to a mobility focused 18 AF and two expeditionary focused units, the 15 Expeditionary Mobility Task Force (EMTF) and 21 EMTF (Boyd, 2005). These new EMTFs renewed the focus on expeditionary support and contingency response thus leading to the creation of the 615 and 621 CRW in March of 2005 (Boyd, 2005). The newly formed CRWs aligned AMC's forward mobility mission with a unit that could provide robust mission support in contingency environments along with the training and equipment standardization necessary to conduct these missions.

### **Current Organization**

The AMC CRGs currently reside in a CRW which was created concurrently with the creation of the CRGs in 2005. The CRW does not have a deployed function but "coordinates the readiness and deployment of contingency GAMSS elements" (Goldfein, 2013). Just as the ALCE, TALCE, and AMOG experienced changes in structure so has the CRW.

In 2005, AMC originally organized the four CRGs into two CRWs. The 615 CRW at Travis AFB and the 621 CRW at McGuire AFB resided under the 15 EMTF and the 21 EMTF respectively. Due to changing force structure in 2012, the two EMTFs transitioned to the USAF EC (Waters, 2012). Along with this transition the USAF EC, the 615 CRW was disbanded and its members and equipment were placed under the 621 CRW (Waters, 2012). As depicted in Figure 4, the two CRGs remained at Travis AFB while the Wing Commander and staff was stationed at what is now Joint Base McGuire-Dix-Lakehurst.

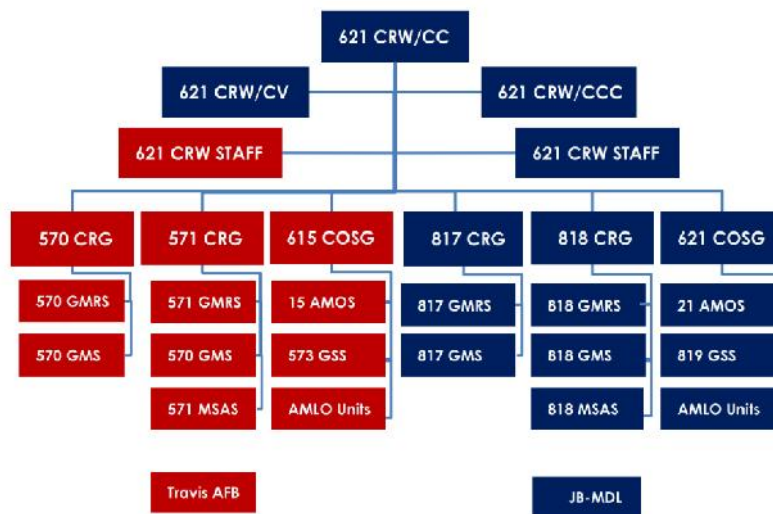


Figure 4: 621 CRW Organization Chart (CRW/CCE, 2014)

In-garrison, the 621 CRW exists under the USAF EC for Administrative Control (ADCON) purposes. When activated, AMC CR units operate under 18 AF for Operational Control (OPCON) as seen in Figure 5. Though the command and staffing structure above the CRG has changed over the last several years, the capability of the CRG has not been noticeably hindered by these changes.

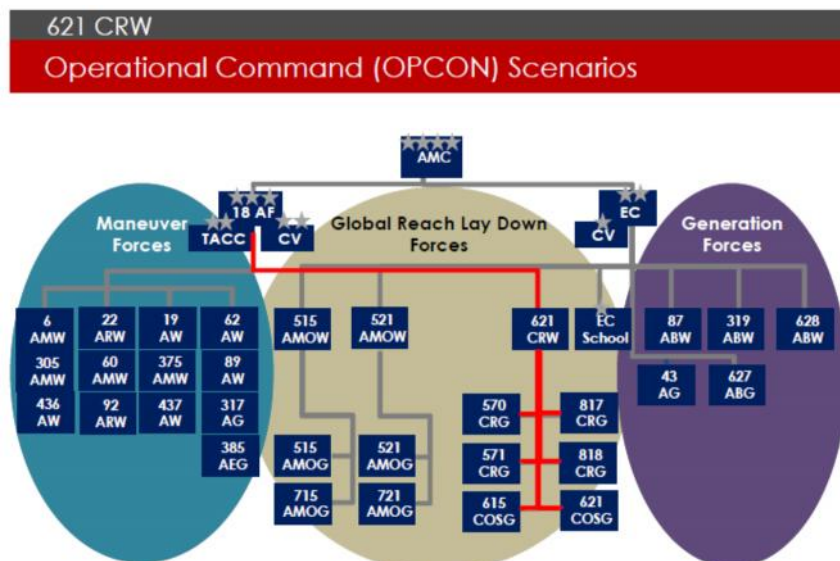


Figure 5: 18 AF/USAF EC OPCON/ADCON Chart (CRW/CCE, 2014)

Along with the changing CRW structure in AMC, the CRGs in PACAF and USAFE have also experienced changes. Though the organization of the units above the CRGs has changed, the theater commanders have continued to value the capabilities of their CRGs. The structure and function of the theater CRGs have not been noticeably affected by organizational change. Figure 6 depicts the current organization of the 36 CRG in PACAF while Figure 7 show the current organization of the 435 CRG in USAFE. It is important to note that the composition of the theater CRGs vary from each other and the AMC CRGs due to theater priorities and historical development.

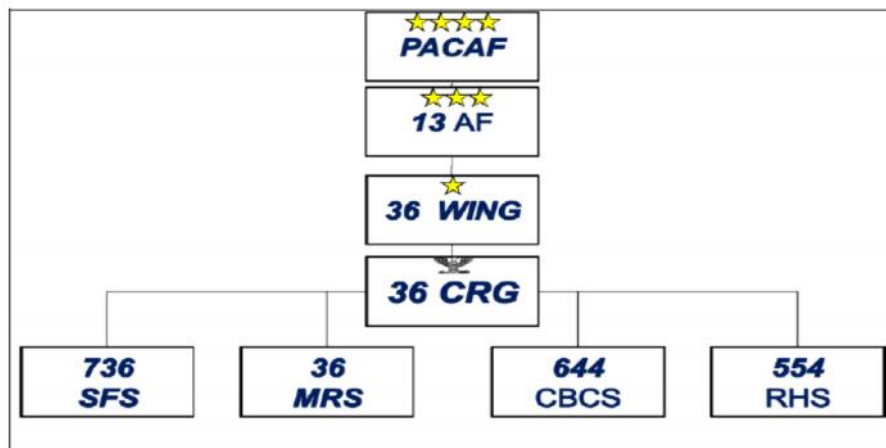


Figure 6: 36 CRG Organization Chart (Shrier, 2013)

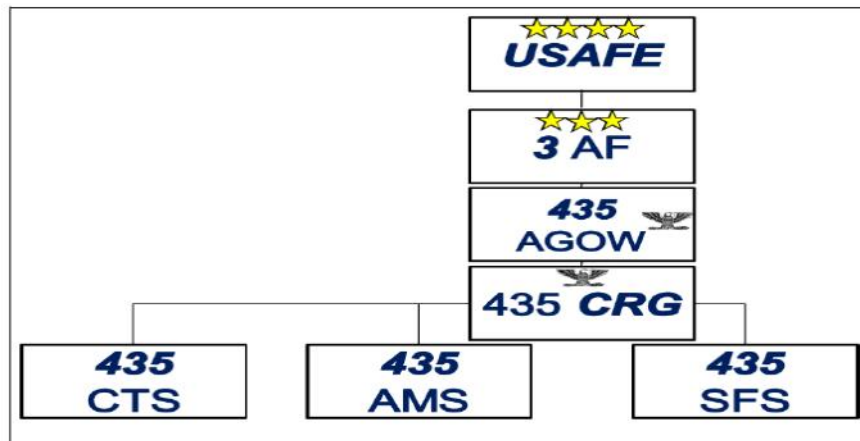


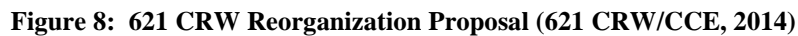
Figure 7: 435 CRG Organization Chart (Shrier, 2013)

Additionally, neither of the theater CRGs exist in a standalone CRW. The 36 CRG resides in the 36th Wing which consists of an Operations Group, Maintenance Group,

Contingency Response Group, Mission Support Group, and Medical Group at Guam (Andersen Air Force Base Public Affairs, 2014). The 435 CRG was originally the 86 CRG which existed in the 86th Airlift Wing at Ramstein AB, Germany. Further organizational changes at USAFE, created a new wing, the 435th Air Ground Operations Wing (AGOW) which consists of an Air Support Operations Group, Contingency Response Group, and Air and Space Communications Group (Air Force Historical Research Agency, 2014). Though the organizational structure of the Air Force's CR units continues to change and remain divergent, it is imperative to maintain the expeditionary capability inherent in these organizations.

### **Reorganization Plans**

The 621 CRW is currently undergoing another structural change in an attempt to increase its performance levels. The reorganization plan found in Figure 8 commenced May 2015 (621 CRW/CCE, 2014). The concept of this reorganization is to combine the GAMMS core functions that exist in the Global Mobility Squadron (C2, Aerial Port, and Maintenance) with the BOS functions that exist in the Global Mobility Readiness Squadrons into a Contingency Response Squadron (CRS) (621 CRW/CCE, 2014). This reorganization is not designed to change or alter AMC's total CR capabilities or functions. It exists solely to reorganize the number of CRGs and to functionally align the squadrons in the CRGs. This streamlining is intended create in garrison efficiencies and cohesion thus providing enhanced CR support to the combatant commander.



The most recent CRG structure research was conducted by Major Ryan Durham from the 2014 graduating class of the Advanced Study of Air Mobility (ASAM) course. Major Durham researched four investigative questions (Durham, 2014):

- 19

4. What tradeoffs are associated with AMC divesting some of its CRF to geographic focused commands like PACAF and USAFE?

Major Durham's research concluded that the CRGs were not employed often as large teams, several AFSCs were over manned when compared to actual use, and further efficiencies would be gained with reorganization (Durham, 2014). His research recommended the two CRGs at each coast consolidate into a single CRG, the overall number of personnel in the CRG be reduced to match use rate, and to redistribute those reduced manpower billets to the PACAF/USAFE CRGs to provide greater capabilities closer to the point of need (Durham, 2014).

### **Summary**

This chapter provided information on the current Department of Defense (DoD) policy/guidance, past organization of Contingency Response (CR) units, the current organization of active duty CR units, and the current 621 CRW reorganization proposal. This chapter also reviewed previous CR research as it pertains to the organization and composition of the units. This information provides a detailed background relevant to the research analysis conducted in Chapter 4.

### **III. Methodology**

#### **Chapter Overview**

This chapter reviews pertinent information regarding the research methods used in this research. This chapter examines the techniques used in the Delphi Process, the Likert Scale, Kendall's W, and the panel selection process. Additionally, this section provides a thorough review of the methods used to develop each of the research surveys.

#### **Delphi Technique**

The Delphi Technique is a decision making tool created by the Rand Corporation in 1950 (Delbecq, Van de Ven, & Gustafson, 1975). It can be used to “increase the creative productivity of group action, facilitate group decision, help stimulate the generation of critical ideas, give guidance in the aggregation of individual judgments” and ultimately save time and effort for broad or complex problem sets (Delbecq, Van de Ven, & Gustafson, 1975). This aggregation of group ideas and points of view provides a process where varied individual judgments are pooled to arrive at decisions that cannot be holistically determined by one person. These problem sets often exhibit a lack of agreement or incomplete knowledge as to the nature of the problem as well as to the components required for a successful solution. The Delphi process has gained considerable recognition as a method to achieve the following objectives: (Delbecq, Van de Ven, & Gustafson, 1975)

- 1) To determine or develop a range of possible program alternatives.
- 2) To explore or expose underlying assumptions or information leading to different judgments.
- 3) To seek out information which may generate a consensus on the part of the respondent group.
- 4) To correlate informed judgments on a topic spanning a wide range of disciplines.

- 5) To educate the respondent group as to the diverse and interrelated aspects of the topic.

To achieve these objectives an initial survey is distributed to the respondents. This first survey is usually open-ended in nature to capture the widest span of creative answers the respondent pool can provide (Delbecq, Van de Ven, & Gustafson, 1975). The researcher then summarizes the results of this first survey and incorporates these results into a second survey for the respondent pool to evaluate. Finally, the third survey asks respondents to compare their initial inputs from the second survey to overall group's inputs. The researcher summarizes the results of all the surveys and provides a feedback report to the respondent group and the decision makers (Delbecq, Van de Ven, & Gustafson, 1975).

A key strength to the Delphi process is that it separates many problems that generally arise in group decision making processes caused by the physical presence of the group members. By accomplishing this group research in an anonymous and isolated method, the process removes normative behaviors, balances individual participation, promotes proactive idea generation, and reduces the burden of schedule conflicts and geographic separation (Delbecq, Van de Ven, & Gustafson, 1975). Though there are many benefits to the process there are also a few weaknesses to note.

Many of the characteristics of the Delphi process previously noted as strengths are also a source of the Delphi process' weaknesses. By conducting the process in an isolated and sometimes anonymous manner, the researcher removes the social-emotional rewards often found when problem solving in an in-person problem solving effort (Delbecq, Van de Ven, & Gustafson, 1975). This lack of rewards can make the respondent feel detached from the problem solving effort thus affecting future survey results or overall member satisfaction. Also a lack of opportunity for immediate clarification or feedback by group members can create communication and interpretation issues for the respondents (Delbecq, Van de Ven, &

Gustafson, 1975). Finally, the process handles conflicting or incompatible ideas by simply pooling respondent priority votes versus an extensive problem solving methodology to resolve the conflict (Delbecq, Van de Ven, & Gustafson, 1975). The Delphi process can supply decision makers with a quantitative analysis of group priorities and highlight several problems and associated solutions; however, further group process or problem solving methods may be required to perfect the solution.

### **Likert Scale**

The Likert Scale is a tool developed by Rensis Likert in 1932 and is used to measure a subject's attitude towards certain questions or statements (Jamieson, 2004). These responses can be measured along the range of positive or negative attitudes toward the subject. The range of responses has a rank order associated with it. In this research, the rank order is from low to high and incorporates the most common version of the scale: strongly disagree, disagree, neutral, agree, and strongly agree.

A pitfall associated with Likert Scales is assuming that the interval between measurement values is equal (Jamieson, 2004). It is incorrect to assume the intensity of a respondent's feelings between 'strongly disagree' and 'disagree' is the same intensity between 'neutral' and 'agree'. Because of this varied measure of intensity between potential responses, it is often argued that it is incorrect to use mean and standard deviation to analyze the results (Jamieson, 2004). Due to the ordinal nature of the Likert Scale, some statisticians recommend using the median as the measure of central tendency (Jamieson, 2004). In contrast to this recommendation, it is often common practice for researchers to utilize mean and standard deviation as this is a generally understood method of data presentation. To balance potential discrepancies associated with the different analysis methods, this research utilizes both ordinal and interval analysis tools for the survey respondents and final analysis.

## Kendall's Ws

This research also enhances the statistical rigor and validity of the Delphi process by incorporating nonparametric analysis techniques to increase the quantitative analysis performed and to describe the measure of consensus achieved. The main purpose of this Delphi process is to achieve a high degree of consensus among the panel experts.

Unfortunately, “few studies provide a clear definition of this notion and, in most cases, the boundaries between high and adequate” are vague (Ju & Jin, 2013). This lack of clarity creates an opportunity to rate the agreement using statistics such as Kendall's coefficient of concordance (W) to “ensure the most rigorous assessment of ratings” (Ju & Jin, 2013).

Most Delphi studies are limited to smaller sample sizes due the use of a panel of experts versus population samples. Additionally, the data that comes from a Delphi study may represent a non-normal distribution that is either skewed, peaked, or flat thus nonparametric statistics such as Kendall's W are an accurate method to interpret study results as this method does not assume a particular population distribution (Ju & Jin, 2013).

To calculate Kendall's W, assume there are  $m$  raters rating  $k$  subjects from 1 to  $k$  in rank order. First calculate  $R_i$  for each subject  $i$ , where the value of  $r_{ij}$  is the rating the rater  $j$  gives to the subject  $i$ :

$$R_i = \sum_{j=1}^m r_{ij} \quad (1)$$

Next calculate  $\bar{R}$  where the value of  $\bar{R}$  is the mean of  $R_i$ :

$$\bar{R} = \frac{1}{k} \sum_{i=1}^k R_i = \frac{1}{k} \sum_{i=1}^k \sum_{j=1}^m r_{ij} = \frac{1}{k} \sum_{j=1}^m \sum_{i=1}^k r_{ij} = \frac{1}{k} \sum_{j=1}^m \frac{k(k+1)}{2} = \frac{m(k+1)}{2} \quad (2)$$

$$R = \sum_{i=1}^k (R_i - \bar{R})^2 \quad (3)$$

Define Kendall's W by:

$$W = \frac{12R}{m^2(k^3 - k)} \quad (4)$$

Finally, the interpretation of the Kendall's W value is shown in Table 1.

**Table 1: Kendall's W Interpretation (Schmidt, 1997)**

Interpretation of Kendall's <i>W</i> .		
<i>W</i>	Interpretation	Confidence in Ranks
.1	Very weak agreement	None
.3	Weak agreement	Low
.5	Moderate agreement	Fair
.7	Strong agreement	High
.9	Unusually strong agreement	Very High

The values in Table 1 were used to determine the level of concordance as a unit of measure to determine how much the panel members agreed on a given subject. In this case, perfect concordance would be indicated by a Kendall's W value of 1.0 and perfect disagreement would be indicated by a Kendall's W value of 0.0.

### Panel Selection

The Delphi process is most valuable when a particular profession does not have the expertise to unilaterally develop solutions to diverse and complicated problems. As the complexity of the problem increases, the solution requires involvement of "experts from heterogeneous disciplines or functions (Delbecq, Van de Ven, & Gustafson, 1975).

Effective panel participation requires the respondents to feel personally involved, have pertinent information or expertise, and feel the panel responses will provide information they value and will help solve the problem (Delbecq, Van de Ven, & Gustafson, 1975).

Panel selection for this study was a very significant portion of the dependability of the research results. Expertise was defined as members that served as a Squadron Commander or

Group Commander in a CRG. This level of expertise guaranteed a balance of tactical, operational, and strategic knowledge while still having significant experience with the human factors of the organization.

Additionally, due to the ebb and flow of CRG employment, this research used current commanders of these units as well as the most recent former commanders of these units. By using past and present commanders, this research captures data from various levels of CRG employment. These criterion limited potential panel members to 28 Squadron Commanders and 12 Group Commanders split evenly between past and present service. Due to current limitations imposed by Air Force Survey guidance, the full survey research must be conducted on 20 or less participants. The initial pool of potential panel members included 40 members due to a historical 50% participation rate for many Delphi studies.

### **Round One Questionnaire**

The initial questions for the round one survey were developed based upon the researcher's previous CRW experience. This first round questionnaire was designed to capture critical issues from the panel without constraining them or leading them in a certain direction. Questions were asked from both a positive and negative perspective and each panel member was given an opportunity to expand their thoughts further in an additional comments section. The intent of the open ended nature of this initial survey was to capture any ideas, thoughts, and relevant issues that could have been left out due to research bias. The five initial questions were reviewed by a group of three Field Grade Officers (FGOs) with CRW experience that were not participating in the research. After minor edits, the survey was sent to all 40 of the potential panel members. The complete version of the Round One Questionnaire is included in Appendix A. Round One Questionnaire.

### Round One Survey Questions:

1. What functions/duties does the 621 CRW perform well in support of the four AMC CRGs?
2. What functions/duties could the 621 CRW perform better in support of the four AMC CRGs?
3. List or describe the potential positives of divesting the CRW and incorporating the CRGs into an Airlift/Air Mobility Wing or Reserve/Guard unit to include potential associate units.
  - a. Airlift/Air Mobility Wing:
  - b. Reserve/Guard Unit (including associate units):
  - c. Other (ABW, AMOW, etc.):
4. List or describe the potential negatives of divesting the CRW and incorporating the CRGs into an Airlift/Air Mobility Wing or Reserve/Guard unit.
  - a. Airlift/Air Mobility Wing:
  - b. Reserve/Guard Unit (including associate units):
  - c. Other (ABW, AMOW, etc.):
5. Please analyze the effectiveness and efficiencies of incorporating the CRGs into an existing Airlift/Air Mobility Wing or Reserve/Guard. Please cite specific reasons for your opinion.

The panel members were given approximately two weeks to complete the survey.

Only 12 members completed the survey in the allotted time. The researcher contacted the rest of the potential panel members and offered a one-week extension. Following this one-week extension, 24 out of 40 potential panel members responded to the questionnaire. The final panel participation results are represented in Table 2.

**Table 2: Round One Participation**

	Past Gp/CC	Past Sq/CC	Current Gp/CC	Current Sq/CC	Total	Percent
Requested	6	14	6	14	40	
Round 1 Participation	3	8	4	9	24	60.00%

The first round of this research returned a plethora of responses by each of the participating panel members. The researcher used subjective analysis to identify the key concepts related to each response. This listing of key concepts proved too numerous and

expansive to serve as a basis for the round two questionnaire. The researcher and a group of three other member's with CR experience reviewed the key concepts to combine the vast array of ideas into succinct key concepts. The final concepts used in the round two questionnaire include the key points submitted most often by the panel members. Additionally, the reviewers recommended the deletion of a few concepts due to the lack of apparent relevancy to the topic and survey size constraints.

### **Round Two Questionnaire**

The second round questionnaire was created by analyzing the consolidated listing of key ideas from round one. These key ideas were then presented back to the panel member as collection of their expert opinions. The panel members were asked to review their level of agreement or disagreement with each concept using a provided Likert Scale. Additionally, the round two questionnaire asked each member to rank order the responses to each question in order from the most important response to the least important response. The fifth question only asked panel members to rank each response with the Likert Scale. A rank order analysis was not requested because the initial responses were so diverse and numerous to attempt a rank order analysis.

The diverse responses for question five were used to create recommend courses of action (COAs) that were presented in a sixth question in the round two questionnaire. This sixth question was devised to concisely analyze the panel members' opinion on the various potential outcomes of this research. Again each panel member was given the opportunity to enter additional comments as necessary to clarify their answers or to add insight into the research.

The second round questionnaire was reviewed by the same review team. After minor edits, the survey was sent to the 24 respondents from the first round of research. An example

question from the second round of the survey can be found below. The complete version of the Round Two Questionnaire is included in Appendix B. Round Two Questionnaire.

1. In Round 1 of this survey, I asked the panel “what functions/duties does the 621 CRW **perform well in support** of the four AMC CRGs?” The panel provided the key functions/duties below. Please use the Likert Scale provided to measure the degree to which you agree or disagree with each key item.

5 = Strongly Agree  
4 = Agree  
3 = Undecided  
2 = Disagree  
1 = Strongly Disagree

**The 621 CRW performs the following functions/duties well...**

- \_\_\_\_\_ Provides support for exercise planning/synchronization and other unit-level training events
- \_\_\_\_\_ Synergizes unity of effort and communication between individual Active Duty (AD) CR units
- \_\_\_\_\_ Expedites “shortfalls”/backfills of personnel/equipment for operational/training events
- \_\_\_\_\_ Informs senior leaders with a unified voice regarding CR specific issues
- \_\_\_\_\_ Compliments AMC staff-level functions to get CR issues standardized, codified, and staffed
- \_\_\_\_\_ Provides focus/guidance on how to properly organize/reorganize CR units
- \_\_\_\_\_ Enables appropriate levels of readiness/rapid response capabilities
- \_\_\_\_\_ Evaluates mission capabilities with robust IG program
- \_\_\_\_\_ Enables proper evaluation standards/processes (Stan/Eval Programs)
- \_\_\_\_\_ Advances strategic-level CR mission development and maturation of CR concepts
- \_\_\_\_\_ Protects CR units from the “skeletonization” of manpower/equipment ISO other in-garrison units

Optional: Please enter additional comments below

2. In addition to the above Likert Scale, please rank order the 11 key items from question #1 with 1 being the most important item and 11 being the least important item.

**The 621 CRW performs the following functions/duties well...**

- \_\_\_\_\_ Provides support for exercise planning/synchronization and other unit-level training events
- \_\_\_\_\_ Synergizes unity of effort and communication between individual Active Duty (AD) CR units
- \_\_\_\_\_ Expedites “shortfalls”/backfills of personnel/equipment for operational/training events
- \_\_\_\_\_ Informs senior leaders with a unified voice regarding CR specific issues
- \_\_\_\_\_ Compliments AMC staff-level functions to get CR issues standardized, codified, and staffed
- \_\_\_\_\_ Provides focus/guidance on how to properly organize/reorganize CR units
- \_\_\_\_\_ Enables appropriate levels of readiness/rapid response capabilities
- \_\_\_\_\_ Evaluates mission capabilities with robust IG program
- \_\_\_\_\_ Enables proper evaluation standards/processes (Stan/Eval Programs)
- \_\_\_\_\_ Advances strategic-level CR mission development and maturation of CR concepts
- \_\_\_\_\_ Protects CR units from the “skeletonization” of manpower/equipment ISO other in-garrison units

Optional: Please enter additional comments below

The panel members were given approximately two weeks to complete the survey. Only 10 members completed the survey in the allotted time. The researcher contacted the rest of the potential panel members and offered a one-week extension. After three weeks, 15 panel members completed their survey. The final panel participation results are represented in Table 3.

**Table 3: Round Two Participation**

	Past Gp/CC	Past Sq/CC	Current Gp/CC	Current Sq/CC	Total	Percent
Requested	6	14	6	14	40	
Round 1 Participation	3	8	4	9	24	60.00%
Round 2 Participation	3	5	0	7	15	62.50%

### **Round Three Questionnaire**

The third round questionnaire was developed to provide an initial analysis of the panel's opinions back to individual respondents. The Likert Scale and rank order responses were analyzed using Microsoft Excel. The initial statistical analysis included the range, mean, standard deviation, and median for the collection of responses for each survey item. This data was then incorporated into the round three questionnaire in which the panel's group statistics were presented to the individual respondents along with their initial responses from round two. The Kendall's W was also calculated for the rank order questions; however, this analysis was not presented to the panel members. The intent of the initial calculation of the Kendall's W was to provide a baseline value to compare with the round three results.

The Round Three Questionnaire gave each respondent the opportunity to adjust their answers if the panel's expert knowledge provided insight into a particular item or if they misinterpreted the intent of the question. The intent of the third questionnaire was to attain further consensus among the group, confirm the accuracy of round two responses, or to confirm the research has concluded due to a lack of change among the panel members.

The third round questionnaire and Excel Worksheet were reviewed by an AFIT (Air Force Institute of Technology) student with prior CRW experience. This review further ensured the use of proper statistical calculations and survey formatting. After minor edits, the survey was sent to the 15 respondents from the second round of research. An example question from the third round of the survey can be found below. The complete version of the Round Three Questionnaire is included in Appendix C. Round Three Questionnaire.

1. In Round 1 of this survey, I asked the panel “what functions/duties does the 621 CRW perform well in support of the four AMC CRGs?” The panel provided the key functions/duties below. Please use the Likert Scale provided to measure the degree to which you agree or disagree with each key item.

5 = Strongly Agree  
4 = Agree  
3 = Undecided  
2 = Disagree  
1 = Strongly Disagree

Range Low	Range High	STD DEV	MEDIAN	AVERAGE
2	5	1.2	4	3.5
1	5	1.4	4	3.5
3	5	0.6	4	4.1
1	5	1.1	4	3.7
1	5	1.3	3	2.7
2	5	1.3	3	3.3
2	5	0.9	4	3.9
2	5	1.0	3	3.4
1	4	1.1	4	3.1
2	5	0.9	3	3.3
1	5	1.2	4	3.7

**The 621 CRW performs the following functions/duties well...**

- |   |  |
|---|--|
| 4 | Provides support for exercise planning/synchronization and other unit-level training events    |
| 5 | Synergizes unity of effort and communication between individual Active Duty (AD) CR units      |
| 4 | Expedites “shortfalls”/backfills of personnel/equipment for operational/training events        |
| 4 | Informs senior leaders with a unified voice regarding CR specific issues                       |
| 4 | Compliments AMC staff-level functions to get CR issues standardized, codified, and staffed     |
| 5 | Provides focus/guidance on how to properly organize/reorganize CR units                        |
| 5 | Enables appropriate levels of readiness/rapid response capabilities                            |
| 5 | Evaluates mission capabilities with robust IG program  |
| 4 | Enables proper evaluation standards/processes (Stan/Eval Programs)                             |
| 3 | Advances strategic-level CR mission development and maturation of CR concepts                  |
| 5 | Protects CR units from the “skeletonization” of manpower/equipment ISO other in-garrison units |

Optional: Please enter additional comments below

2. In addition to the above Likert Scale, please rank order the 11 key items from question #1 with 1 being the most important item and 11 being the least important item.

Range Low	Range High	STD DEV	MEDIAN	AVERAGE
1	11	3.5	9	7.0
1	11	3.2	5	6.1
1	11	3.0	7	5.9
1	9	2.3	4	4.3
2	10	2.4	5	5.9
1	10	2.7	5	4.7
1	9	2.7	2	3.0
2	11	2.7	9	8.4
4	11	1.9	8	7.9
2	11	3.1	4	5.5
1	11	3.5	8	7.3

**The 621 CRW performs the following functions/duties well...**

- |    |  |
|----|--|
| 8  | Provides support for exercise planning/synchronization and other unit-level training events    |
| 3  | Synergizes unity of effort and communication between individual Active Duty (AD) CR units      |
| 7  | Expedites “shortfalls”/backfills of personnel/equipment for operational/training events        |
| 1  | Informs senior leaders with a unified voice regarding CR specific issues                       |
| 9  | Compliments AMC staff-level functions to get CR issues standardized, codified, and staffed     |
| 6  | Provides focus/guidance on how to properly organize/reorganize CR units                        |
| 5  | Enables appropriate levels of readiness/rapid response capabilities                            |
| 11 | Evaluates mission capabilities with robust IG program  |
| 10 | Enables proper evaluation standards/processes (Stan/Eval Programs)                             |
| 4  | Advances strategic-level CR mission development and maturation of CR concepts                  |
| 2  | Protects CR units from the “skeletonization” of manpower/equipment ISO other in-garrison units |

Optional: Please enter additional comments below

The panel members were given approximately one week to complete the survey. The third survey concluded when 13 panel members completed their survey in the allotted time frame. The final panel participation results are represented in Table 4.

**Table 4: Round Three Participation**

	Past Gp/CC	Past Sq/CC	Current Gp/CC	Current Sq/CC	Total	Percent
Requested	6	14	6	14	40	
Round 1 Participation	3	8	4	9	24	60.00%
Round 2 Participation	3	5	0	7	15	62.50%
Round 3 Participation	3	3	0	7	13	86.67%

Upon receipt of the final survey, any changes received were entered into the Excel Workbook for round three. The researcher conducted statistical analysis on this data to identify and rank order responses from most agreed upon item to least agreed upon item and from highest level of importance to lowest level of importance for each question. The rank order questions were analyzed using the previously mentioned Kendall's W to calculate the level of concordance for each of question. Only two of the panel members elected to change their responses from the round two questionnaire thus the round two surveys for the two unavailable members were used to complete the round three statistical analysis.

## Summary

This chapter reviewed the pertinent information regarding the research methods used in this study. It examined the techniques used in the Delphi Process, the Likert Scale, Kendall's W, and the panel selection process. Additionally, this section provided a thorough review of the methods used to develop each of the research surveys and served as the foundation for the analysis performed in Chapter 4.

## IV. Analysis and Results

### Chapter Overview

This chapter reviews the analysis conducted in this research. Each of the 11 survey questions from the final survey are reviewed individually. Several statistical tools are used to analyze the panel results. Additionally, some questions are analyzed in respect to different subgroups within the panel in an attempt to identify differences between the opinions of different panel demographics.

### Question 1

Question 1 asked the panel to agree or disagree with the consolidated list of tasks the panel provided in Round 1 of the research. These tasks were identified as functions/duties the CRW performs well in support of the four CRGs. Table 5 depicts a rank ordered listing based on level of agreement from highest agreement to lowest agreement.

**Table 5: Question 1 Results**

RANK	AGREE OR DISAGREE WITH TASKS THE CRW DOES WELL (RANKED FROM HIGHEST TO LOWEST AGREEMENT) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Expedites "shortfalls"/backfills of personnel/equipment for operational/training events	13	2	0	4.1	0.6	3	5	4.0
2	Enables appropriate levels of readiness/rapid response capabilities	10	4	1	3.9	0.9	2	5	4.0
3	Informs senior leaders with a unified voice regarding CR specific issues	10	3	2	3.7	1.1	1	5	4.0
4	Protects CR units from the "skeletonization" of manpower/equipment ISO other in-garrison units	10	2	3	3.6	1.2	1	5	4.0
5	Synergizes unity of effort and communication between individual Active Duty (AD) CR units	9	3	3	3.5	1.4	1	5	4.0
6	Provides support for exercise planning/synchronization and other unit-level training events	9	1	5	3.5	1.2	2	5	4.0
7	Evaluates mission capabilities with robust IG program	7	5	3	3.4	1.0	2	5	3.0
8	Provides focus/guidance on how to properly organize/reorganize CR units	7	2	6	3.3	1.3	2	5	3.0
9	Advances strategic-level CR mission development and maturation of CR concepts	6	6	3	3.3	0.9	2	5	3.0
10	Enables proper evaluation standards/processes (Stan/Eval Programs)	8	2	5	3.2	0.9	2	4	4.0
11	Compliments AMC staff-level functions to get CR issues standardized, codified, and staffed	5	3	7	2.7	1.3	1	5	3.0

As seen in Table 5, the panel agreed that the CRW construct expedites replacement of shortfall personnel, ensures unit's readiness and rapid response capabilities, and presents a unified voice to senior leaders. The panel expressed less agreement that that the wing

agencies advance the strategic-level CR mission development, provide proper Standardization and Evaluation programs, and compliment HHQ staff functions.

Further analysis of Question 2 reveals a slight difference in the top three ranked items between the East Coast and West Coast CRGs. As seen in Table 6, the East Coast CRGs agreed the CRW enables readiness and rapid response capabilities, expedites shortfalls of personnel and equipment, and protects CR units from “skelotonization” by other units.

**Table 6: Question 1 East Coast Results**

RANK	EAST COAST AGREE OR DISAGREE WITH TASKS THE CRW DOES WELL (RANKED FROM HIGHEST TO LOWEST AGREEMENT) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Enables appropriate levels of readiness/rapid response capabilities	7	1	0	4.3	0.7	3	5	4.0
2	Expedites “shortfalls”/backfills of personnel/equipment for operational/training events	6	2	0	4.0	0.8	3	5	4.0
3	Protects CR units from the “skelotonization” of manpower/equipment ISO other in-garrison units	5	2	1	3.8	1.0	2	5	4.0

Additionally, Table 7 reveals that the West Coast CRGs agreed that the CRW expedites shortfalls of personnel and equipment, synergizes unity of effort and communication between CR units, and enables proper evaluation standards and processes.

**Table 7: Question 1 West Coast Results**

RANK	WEST COAST AGREE OR DISAGREE WITH TASKS THE CRW DOES WELL (RANKED FROM HIGHEST TO LOWEST AGREEMENT) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Expedites “shortfalls”/backfills of personnel/equipment for operational/training events	7	0	0	4.3	0.5	4	5	4.0
2	Synergizes unity of effort and communication between individual Active Duty (AD) CR units	6	1	0	4.1	0.7	3	5	4.0
3	Enables proper evaluation standards/processes (Stan/Eval Programs)	7	0	0	4.0	0.0	4	4	4.0

Additional analysis shows a disparity between former and present commanders. As seen in Table 8, the former commanders agreed the CRW expedites shortfalls of personnel and equipment, enables readiness and rapid response capabilities, and enables proper evaluation standards and processes.

**Table 8: Question 1 Former CC Results**

RANK	FORMER CC AGREE OR DISAGREE WITH TASKS THE CRW DOES WELL (RANKED FROM HIGHEST TO LOWEST AGREEMENT) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Expedites "shortfalls"/backfills of personnel/equipment for operational/training events	6	2	0	4.3	0.9	3	5	4.5
2	Enables appropriate levels of readiness/rapid response capabilities	6	1	1	4.0	1.1	2	5	4.0
3	Inform senior leaders with a unified voice regarding CR specific issues	4	4	0	3.9	1.0	3	5	3.5

Furthermore, Table 9 shows that the current commanders agreed the CRW expedites shortfalls of personnel and equipment, enables readiness and rapid response capabilities, and informs senior leaders with a unified voice.

**Table 9: Question 1 Current CC Results**

RANK	CURRENT CC AGREE OR DISAGREE WITH TASKS THE CRW DOES WELL (RANKED FROM HIGHEST TO LOWEST AGREEMENT) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Expedites "shortfalls"/backfills of personnel/equipment for operational/training events	7	0	0	4.0	0.0	4	4	4.0
2	Inform senior leaders with a unified voice regarding CR specific issues	6	0	1	3.9	0.9	2	5	4.0
3	Evaluates mission capabilities with robust IG program	5	1	1	3.9	1.1	2	5	4.0

## Question 2

Question 2 asked the panel to rank order the list of functions/duties identified in Question 1 that the CRW does well in support of the CRGs. Table 10 depicts a rank ordered list from 1 to 11 with 1 being the most important and 11 being the least important.

**Table 10: Question 2 Results**

RANK	RANK THE TASKS THAT THE CRW DOES WELL IN ORDER OF IMPORTANCE (RANKED FROM MOST IMPORTANT TO LEAST IMPORTANT) KENDALL'S W = .24, WEAK AGREEMENT, LOW CONFIDENCE				AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Enables appropriate levels of readiness/rapid response capabilities				3.0	2.7	1	9	2.0
2	Inform senior leaders with a unified voice regarding CR specific issues				4.3	2.3	1	9	4.0
3	Provides focus/guidance on how to properly organize/reorganize CR units				4.7	2.7	1	10	5.0
4	Advances strategic-level CR mission development and maturation of CR concepts				5.5	3.1	2	11	4.0
5	Expedites "shortfalls"/backfills of personnel/equipment for operational/training events				5.9	3.0	1	11	7.0
6	Compliments AMC staff-level functions to get CR issues standardized, codified, and staffed				5.9	2.4	2	10	5.0
7	Synergizes unity of effort and communication between individual Active Duty (AD) CR units				6.1	3.2	1	11	5.0
8	Provides support for exercise planning/synchronization and other unit-level training events				7.0	3.5	1	11	9.0
9	Protects CR units from the "skeletonization" of manpower/equipment ISO other in-garrison units				7.3	3.5	1	11	8.0
10	Enables proper evaluation standards/processes (Stan/Eval Programs)				7.9	1.9	4	11	8.0
11	Evaluates mission capabilities with robust IG program				8.4	2.7	2	11	9.0

The panel found weak agreement with a Kendall's W rating of 0.24. This value indicates low confidence in the panel's rank order of the key concepts. The panel concluded

the most important tasks were enabling readiness/rapid response capabilities, informing senior leaders with a unified voice, providing guidance on the organization of CR units. The least important tasks were protecting the manpower and equipment of the CR units, enabling proper Standardization and Evaluation programs, and enabling a robust Inspector General (IG) program.

### Question 3

Question 3 asked the panel to agree or disagree with the consolidated list of tasks the panel provided in Round 1 of the research. These tasks were identified as functions/duties the CRW could perform better in support of the four CRGs. Table 11 depicts a rank ordered listing based on level of agreement from highest agreement to lowest agreement.

**Table 11: Question 3 Results**

RANK	AGREE OR DISAGREE WITH TASKS THE CRW COULD PERFORM BETTER (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Improve representation to HHQ for current/future resources (manpower, equipment, funding)	14	0	1	4.4	1.1	1	5	5.0
2	Enhance standardization among the CR units (training, manning, readiness, processes)	13	1	1	4.3	0.9	2	5	5.0
3	Advocate for more meaningful/current policy (AFIs, reference material, checklists)	13	1	1	4.3	0.9	2	5	4.0
4	Coordinate robust training opportunities/venues (i.e. FEMA/NORTHCOM/COCOM exercises)	12	2	1	4.1	0.9	2	5	4.0
5	Advocate for CR-specific equipment UTCs vs seeking AF-wide consensus for UTC changes	10	4	1	4.0	1.0	2	5	4.0
6	Improve CR Marketing and Education to other COCOMs/MAJCOMs	12	0	3	3.9	1.2	1	5	4.0
7	Advocate for manning as an operational unit (crew ratio vs rated staff process and UTC manning)	9	3	3	3.7	1.3	1	5	4.0
8	Provide standardized deployment/logistics functions (equipment management/UDM functions)	9	3	3	3.7	1.3	1	5	4.0
9	Focus on strategic staff work that will improve/support the organization vs operational issues	7	7	1	3.6	0.9	2	5	3.0
10	Improve administrative responsibilities (taskings, project POCs, evaluations, cross-coast coordination)	7	4	4	3.5	1.2	2	5	3.0
11	Establish better working agreements with base partners	8	1	6	3.3	1.4	1	5	4.0
12	Improve internal mission tasking process (Wing XP/WOC Process)	6	4	5	3.1	1.1	1	5	3.0

As seen in Table 11, the panel agreed the CRW could improve representation to HHQ regarding resources, enhance standardization among CR units, and advocate for more current policy instructions. The panel expressed less agreement that the CRW should improve administrative responsibilities, establish better working agreements with base partners, and improve internal mission tasking processes.

Further analysis of Question 3 reveals a slight difference in the top three ranked items between the East Coast and West Coast CRGs. As seen in Table 12, the East Coast CRGs agreed the CRW could improve representation to HHQ regarding resources, advocate for more meaningful policy, and better coordinate robust training opportunities.

**Table 12: Question 3 East Coast Results**

RANK	EAST COAST AGREE OR DISAGREE WITH TASKS THE CRW COULD PERFORM BETTER (RANKED FROM HIGHEST TO LOWEST AGREEMENT) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Improve representation to HHQ for current/future resources (manpower, equipment, funding)	8	0	0	4.8	0.5	4	5	5.0
2	Advocate for more meaningful/current policy (AFIs, reference material, checklists)	7	1	0	4.5	0.8	3	5	5.0
3	Coordinate robust training opportunities/venues (i.e. FEMA/NORTHCOM/COCOM exercises)	8	0	0	4.4	0.5	4	5	4.0

Additionally, Table 13 reveals that the West Coast CRGs agreed that the CRW could enhance standardization among the CR units, improve representation to HHQ regarding resources, and advocate for more meaningful policy.

**Table 13: Question 3 West Coast Results**

RANK	WEST COAST AGREE OR DISAGREE WITH TASKS THE CRW COULD PERFORM BETTER (RANKED FROM HIGHEST TO LOWEST AGREEMENT) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Enhance standardization among the CR units (training, manning, readiness, processes)	6	0	1	4.4	1.1	2	5	5.0
2	Improve representation to HHQ for current/future resources (manpower, equipment, funding)	6	0	1	4.0	1.4	1	5	4.0
3	Advocate for more meaningful/current policy (AFIs, reference material, checklists)	6	0	1	4.0	1.0	2	5	4.0

Additional analysis of Question 3 also reveals a slight difference in the top three ranked items between former and current commanders. As seen in Table 14, the former commanders agreed that the CRW could improve representation to HHQ regarding resources, advocate for more meaningful policy, and coordinate more robust training opportunities.

**Table 14: Question 3 Former CC Results**

RANK	FORMER CC AGREE OR DISAGREE WITH TASKS THE CRW COULD PERFORM BETTER (RANKED FROM HIGHEST TO LOWEST AGREEMENT) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Improve representation to HHQ for current/future resources (manpower, equipment, funding)	8	0	0	4.6	0.5	4	5	5.0
2	Advocate for more meaningful/current policy (AFIs, reference material, checklists)	8	0	0	4.4	0.5	4	5	4.0
3	Coordinate robust training opportunities/venues (i.e. FEMA/NORTHCOM/COCOM exercises)	7	1	0	4.1	0.6	3	5	4.0

Conversely Table 15 reveals that current commanders agreed that the CRW could enhance standardization among the CR units, provide standardized deployment and logistics functions, and advocate for CR-specific equipment UTCs.

**Table 15: Question 3 Current CC Results**

RANK	CURRENT CC AGREE OR DISAGREE WITH TASKS THE CRW COULD PERFORM BETTER (RANKED FROM HIGHEST TO LOWEST AGREEMENT) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Enhance standardization among the CR units (training, manning, readiness, processes)	7	0	0	4.6	0.5	4	5	5.0
2	Provide standardized deployment/logistics functions (equipment management/UDM functions)	6	1	0	4.6	0.8	3	5	5.0
3	Advocate for CR-specific equipment UTCs vs seeking AF-wide consensus for UTC changes	6	1	0	4.3	0.8	3	5	4.0

#### Question 4

Question 4 asked the panel to rank order the list of functions/duties identified in Question 3 that the CRW could perform better in support of the CRGs. Table 16 depicts a rank ordered list from 1 to 12 with 1 being the most important and 12 being the least important.

**Table 16: Question 4 Results**

RANK	RANK ORDER THE TASKS THE CRW COULD PERFORM BETTER (RANKED FROM MOST IMPORTANT TO LEAST IMPORTANT) KENDALL'S W = .27, WEAK AGREEMENT, LOW CONFIDENCE				AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Improve representation to HHQ for current/future resources (manpower, equipment, funding)				3.5	3.5	1	12	2.0
2	Enhance standardization among the CR units (training, manning, readiness, processes)				4.5	3.2	1	12	3.0
3	Advocate for more meaningful/current policy (AFIs, reference material, checklists)				5.0	2.6	2	11	5.0
4	Establish better working agreements with base partners				5.3	3.7	1	12	4.0
5	Improve CR Marketing and Education to other COCOMs/MAJCOMs				5.6	2.9	1	11	5.0
6	Advocate for manning as an operational unit (crew ratio vs rated staff process and UTC manning)				5.6	3.1	1	11	5.0
7	Coordinate robust training opportunities/venues (i.e. FEMA/NORTHCOM/COCOM exercises)				5.7	3.0	1	12	6.0
8	Focus on strategic staff work that will improve/support the organization vs operational issues				8.1	2.6	4	12	8.0
9	Provide standardized deployment/logistics functions (equipment management/UDM functions)				8.2	2.4	4	12	8.0
10	Advocate for CR-specific equipment UTCs vs seeking AF-wide consensus for UTC changes				8.3	2.8	3	12	9.0
11	Improve internal mission tasking process (Wing XP/WOC Process)				8.6	3.5	1	11	10.0
12	Improve administrative responsibilities (taskings, project POCs, evaluations, cross-coast coordination)				9.1	2.7	2	12	10.0

The panel found weak agreement with a Kendall's W rating of 0.27. This value indicates low confidence in the panel's rank order listing. The panel concluded the most important tasks the CRW could perform better are improve representation to HHQ regarding resource issues, enhance standardization among CR units, and advocate for more meaning full

policy and guidance. The least important tasks include advocate for CR-specific UTCs, improve internal mission tasking processes, and improve administrative responsibilities.

## Question 5

Question 5 asked the panel to agree or disagree with the consolidated list of items the panel provided in Round 1 of the research. These items were identified as the advantages of divesting the CRW and organizing the CRGs into an AMW, the ARC, or an AMOW.

**Table 17: Question 5 AMW Results**

RANK	AGREE OR DISAGREE WITH ADVANTAGES OF AMW (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Improved access to mobility aircraft and synergistic training, exercise, and deployment support	14	0	1	4.4	0.8	2	5	5.0
2	Increased pool of CR trained Airmen especially for Low Density High Demand AFSCs	11	3	1	4.1	1.0	2	5	4.0
3	Allows AMW members to become more knowledgeable of unique CR mission set/requirements	12	3	0	4.0	0.7	3	5	4.0
4	Enhanced cross-flow, career progression, and ability to develop Airmen	10	3	2	3.8	1.2	1	5	4.0
5	Increased expertise (CR functional SMEs) available to benefit AMW organizations (LRS, SF, CE)	10	3	2	3.8	1.0	2	5	4.0
6	Synergistic long-range scheduling, current operations, and operational planning	10	3	2	3.7	0.9	2	5	4.0
7	Improved AFSC-specific functional proficiency and increased efficiency/flexibility for both units	10	2	3	3.7	1.2	1	5	4.0
8	Streamlined administrative/staff support (performance reports, taskings, discipline, PA, Protocol, JAG)	8	3	4	3.4	1.2	1	5	4.0
9	Reduced seams and tensions between tenant/host wings	7	6	2	3.4	1.1	1	5	3.0
10	Collocated and centrally managed/maintained equipment	6	4	5	3.3	1.3	1	5	3.0
11	Eliminating ADCON/OPCON split between 18 AF/USAF EC would improve command and control	7	2	6	3.2	1.6	1	5	3.0
12	Further manpower/funding reductions by eliminating redundant positions	4	5	6	2.9	1.2	1	5	3.0

Table 17 depicts a rank ordered listing based on level of agreement from highest agreement to lowest agreement. As seen in Table 17, the panel agreed that the advantages of moving CRGs to an AMW include improved access to mobility aircraft and more synergistic employment, an increased pool of CR trained Airmen for Low Density/High Demand AFSCs, and increasing AMW member's knowledge of the CR mission. The panel expressed less agreement that the advantages include centrally maintained equipment, eliminating ADCON/OPCON issues between 18 AF and the USAF EC, and reducing manpower/funding requirements.

**Table 18: Question 5 ARC Results**

RANK	AGREE OR DISAGREE WITH ADVANTAGES OF ARC (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Increased continuity and mission expertise/corporate knowledge	9	3	3	3.5	1.5	1	5	4.0
2	Reduced cost for day-to-day operations (smaller daily in-garrison footprint) and per person costs	9	1	5	3.2	1.3	1	5	4.0
3	Reduced resources for initial training requirements as a result of reduced personnel turnover	7	3	5	3.1	1.5	1	5	3.0
4	TFI organization could balance efficiency/effectiveness trade off due to ARC and AD balance	5	7	3	3.1	1.3	1	5	3.0
5	Increased CR mission focus as many of the non-CR in-garrison functions are not as prevalent	4	8	3	3.0	1.1	1	5	3.0
6	Increased AD rated manning for flying units and staff positions due to AD CR force reduction	6	5	4	3.0	1.1	1	4	3.0
7	Reserve members could serve as training specialists/evaluators ISO AD CR during high turnover	6	2	7	2.9	1.6	1	5	3.0
8	Reduced risk for posse comitatus issues and increased acceptance by state disaster entities	5	3	7	2.6	1.4	1	5	3.0
9	Enhanced utilization, specific training, and improved relationships for HA/DR missions	4	2	9	2.5	1.3	1	5	2.0
10	HA/DR missions would have a high level of volunteerism due to proximity and disaster lead time	2	5	8	2.3	1.2	1	5	2.0

Table 18 depicts a rank ordered listing based on level of agreement from highest agreement to lowest agreement. As seen in Table 18, the panel agreed that the advantages of moving CRGs to the ARC include increased continuity and mission expertise, reduced day-to-day costs, and reduced training requirements due to lower personnel turnover. The panel expressed less agreement that the advantages include reduced posse comitatus issues, enhanced use and training for HA/DR missions, and increased CR involvement for HA/DR missions.

**Table 19: Question 5 AMOW Results**

RANK	AGREE OR DISAGREE WITH ADVANTAGES OF AMOW (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Improved AMC forward presence/closer to geographic need thus guaranteeing faster response time	12	0	3	3.8	1.0	2	5	4.0
2	Enhanced geographic focus allows more in-depth training/planning/relationship building	10	2	3	3.8	1.3	1	5	4.0
3	Allows AMOW members to become more knowledgeable of CR mission set/requirements	9	2	4	3.5	1.1	2	5	4.0
4	Enhanced cross-flow, career progression, and ability to develop Airmen	9	3	3	3.5	1.0	2	5	4.0
5	Improved AFSC-specific functional proficiency and increased efficiency/flexibility for both units	10	1	4	3.5	1.0	2	5	4.0
6	Allows current ARC units to prioritize HA/DR mission while AMOW CR units would maintain global focus	6	5	4	3.3	1.3	1	5	3.0
7	Further manpower/funding reductions by eliminating redundant positions	6	3	6	3.2	1.2	2	5	3.0
8	Improved advocacy for in-garrison support	4	5	6	2.9	1.1	1	5	3.0

Table 19 depicts a rank ordered listing based on level of agreement from highest agreement to lowest agreement. As seen in Table 19, the panel agreed that the advantages of moving CRGs to an AMOW include improved forward presence, enhanced geographical focus, and increasing AMOW member's knowledge about the CR mission. The panel

expressed less agreement that the advantages include allowing current ARC units to prioritize HA/DR missions, reduced manpower/funding requirements, and improved advocacy for in-garrison support.

## Question 6

Question 6 asked the panel to rank order the advantages of divesting the CRW and organizing the CRGs into an AMW, the ARC, or an AMOW.

**Table 20: Question 6 AMW Results**

RANK	RANK THE ADVANTAGES OF AMW IN ORDER OF IMPORTANCE (RANKED FROM MOST IMPORTANT TO LEAST IMPORTANT) KENDALL'S W = .41, WEAK/MODERATE AGREEMENT, LOW/FAIR CONFIDENCE				AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Increased pool of CR trained Airmen especially for Low Density High Demand AFSCs				2.7	2.5	1	10	2.0
2	Improved access to mobility aircraft and synergistic training, exercise, and deployment support				2.8	1.7	1	7	2.0
3	Synergistic long-range scheduling, current operations, and operational planning				4.8	1.8	1	7	5.0
4	Improved AFSC-specific functional proficiency and increased efficiency/flexibility for both units				5.0	2.6	1	9	6.0
5	Enhanced cross-flow, career progression, and ability to develop Airmen				5.3	2.9	2	12	5.0
6	Increased expertise (CR functional SMEs) available to benefit AMW organizations (LRS, SF, CE)				6.7	3.2	2	11	8.0
7	Reduced seams and tensions between tenant/host wings				7.2	3.1	3	12	7.0
8	Collocated and centrally managed/maintained equipment				8.0	2.5	3	11	8.0
9	Eliminating ADCON/OPCON split between 18 AF/USAF EC would improve command and control				8.7	4.0	1	12	11.0
10	Allows AMW members to become more knowledgeable of unique CR mission set/requirements				8.8	2.6	3	12	9.0
11	Further manpower/funding reductions by eliminating redundant positions				8.9	3.1	3	12	10.0
12	Streamlined administrative/staff support (performance reports, taskings, discipline, PA, Protocol, JAG)				9.0	2.0	5	12	9.0

Table 20 depicts a rank ordered list of the AMW advantages from 1 to 12 with 1 being the most important and 12 being the least important. The panel found weak to moderate agreement with a Kendall's W rating of 0.41. This value indicates low to fair confidence in the panel's rank order listing. The panel concluded the most important advantages were an increased pool of CR trained Airmen, improved access to mobility aircraft and more synergistic employment support, and improved mission planning. The least important advantages include increased AMW member's knowledge on the CR mission, manpower/funding reductions, and streamlined administrative and staff functions.

**Table 21: Question 6 ARC Results**

RANK	RANK THE ADVANTAGES OF ARC IN ORDER OF IMPORTANCE (RANKED FROM MOST IMPORTANT TO LEAST IMPORTANT) KENDALL'S W = .25, WEAK AGREEMENT, LOW CONFIDENCE				AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Increased continuity and mission expertise/corporate knowledge				2.7	2.3	1	9	2.0
2	Increased CR mission focus as many of the non-CR in-garrison functions are not as prevalent				4.3	1.9	1	8	5.0
3	Reduced resources for initial training requirements as a result of reduced personnel turnover				4.9	1.7	2	8	5.0
4	Reduced cost for day-to-day operations (smaller daily in-garrison footprint) and per person costs				4.9	2.9	1	10	5.0
5	TFI organization could balance efficiency/effectiveness trade off due to ARC and AD balance				5.2	2.6	1	9	5.0
6	Reserve members could serve as training specialists/evaluators ISO AD CR during high turnover				5.5	2.9	1	10	6.0
7	Increased AD rated manning for flying units and staff positions due to AD CR force reduction				6.1	3.7	1	10	8.0
8	Enhanced utilization, specific training, and improved relationships for HA/DR missions				6.1	2.7	2	10	7.0
9	HA/DR missions would have a high level of volunteerism due to proximity and disaster lead time				7.5	2.3	1	10	8.0
10	Reduced risk for posse comitatus issues and increased acceptance by state disaster entities				7.9	2.2	4	10	8.0

Table 21 depicts a rank ordered list of the ARC advantages from 1 to 10 with 1 being the most important and 10 being the least important. The panel found weak agreement with a Kendall's W rating of 0.25. This value indicates low confidence in the panel's rank order listing. The panel concluded the most important advantages were increased continuity and mission expertise, increased CR mission focus due to a reduced level of in-garrison functions, and reduced training requirements due to lower personnel turnover. The least important advantages include enhanced use and training for HA/DR missions, and increased CR involvement for HA/DR missions, reduced posse comitatus issues.

**Table 22: Question 6 AMOW Results**

RANK	RANK THE ADVANTAGES OF AMOW IN ORDER OF IMPORTANCE (RANKED FROM MOST IMPORTANT TO LEAST IMPORTANT) KENDALL'S W = .24, WEAK AGREEMENT, LOW CONFIDENCE				AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Enhanced geographic focus allows more in-depth training/planning/relationship building				2.7	1.9	1	7	2.0
2	Improved AMC forward presence/closer to geographic need thus guaranteeing faster response time				3.2	2.6	1	8	2.0
3	Improved AFSC-specific functional proficiency and increased efficiency/flexibility for both units				3.5	1.6	1	6	4.0
4	Further manpower/funding reductions by eliminating redundant positions				4.8	2.5	1	8	5.0
5	Enhanced cross-flow, career progression, and ability to develop Airmen				5.1	1.8	2	8	5.0
6	Improved advocacy for in-garrison support				5.2	2.3	1	8	5.0
7	Allows AMOW members to become more knowledgeable of CR mission set/requirements				5.7	1.8	2	8	6.0
8	Allows current ARC units to prioritize HA/DR mission while AMOW CR units would maintain global focus				5.8	1.8	3	8	6.0

Table 22 depicts a rank ordered list of the AMOW advantages from 1 to 8 with 1 being the most important and 8 being the least important. The panel found weak agreement with a Kendall's W rating of 0.24. This value indicates low confidence in the panel's rank

order listing. The panel concluded the most important advantages were enhanced geographical focus, improved forward presence, and improved AFSC-specific functional proficiency and flexibility. The least important advantages include improved advocacy for in-garrison support, increased AMOW member's knowledge on CR mission, and allowing current ARC units to prioritize HA/DR missions.

## Question 7

Question 7 asked the panel to agree or disagree with the consolidated list of items the panel provided in Round 1 of the research. These items were identified as the disadvantages of divesting the CRW and organizing the CRGs into an AMW, the ARC, or an AMOW.

**Table 23: Question 7 AMW Results**

RANK	AGREE OR DISAGREE WITH DISADVANTAGES OF AMW (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Reduced CR standardization due to multiple CR units spread among multiple non-CR wings	12	1	2	4.2	1.3	1	5	5.0
2	Potential desertion of AMLO, MSAS, and AMOS missions	10	4	1	3.9	0.9	2	5	4.0
3	AMW would use CR equipment for everyday missions thus reducing availability/readiness	10	0	5	3.6	1.4	1	5	4.0
4	The majority of CR member's time/training would be used to support the flying mission	9	2	4	3.5	1.3	1	5	4.0
5	Decreased priority for funding, personnel, and resources	10	1	4	3.5	1.4	1	5	4.0
6	Reduced priority or availability of specialized CR training	9	2	4	3.5	1.2	1	5	4.0
7	AMW/CC may not have the unique perspective/knowledge required for CR operations	8	2	5	3.2	1.5	1	5	4.0
8	Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by AMW/CC	7	2	6	2.9	1.5	1	5	3.0
9	AMW would maintain CR equipment thus reducing CR member's equipment familiarization	4	3	8	2.7	1.1	1	5	2.0
10	Potential dissolution of AMC's PHOENIX MOBILITY PROGRAM	3	6	6	2.7	1.3	1	5	3.0
11	Mission schizophrenia for in-garrison/CR/airlift missions may cause issues and overburden AMW/CC	5	2	8	2.7	1.3	1	5	2.0
12	18 AF will not focus on CR mission as well as USAF EC is capable of doing (ADCON)	3	4	8	2.4	1.1	1	4	2.0

Table 23 depicts a rank ordered listing based on level of agreement from highest agreement to lowest agreement. As seen in Table 23, the panel agreed the disadvantages of moving CRGs to an AMW include reduced CR standardization, potential desertion of other mission sets (AMLO/MSAS/AMOS), and reduced readiness due to equipment sharing. The panel expressed less agreement that the disadvantages include dissolution of the PHOENIX MOBILITY Program, overburdened AMW/CC due to mission schizophrenia, and reduced focus on CR mission by 18 AF.

**Table 24: Question 7 ARC Results**

RANK	AGREE OR DISAGREE WITH DISADVANTAGES OF ARC (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	ARC units could not provide full time coverage for JTF-PO alert (JTF-PO policy changes needed)	13	1	1	4.3	0.9	2	5	5.0
2	Robust training requirements would be hard to maintain in part-time status	13	1	1	4.3	0.9	2	5	4.0
3	Reduced standardization between CR units	14	0	1	4.2	1.0	1	5	4.0
4	36-hour response time/lack of robust manning would not be conducive to rapid response requirements	12	1	2	4.2	1.1	2	5	5.0
5	Inability to support HHQ staff functions similar to an AD wing	10	4	1	3.9	1.0	2	5	4.0
6	Reduced operational deployment duration due to return to civilian job status	9	4	2	3.7	1.2	1	5	4.0
7	ARC unit may drop CR mission when another mission set is offered with more political appeal	7	6	2	3.7	1.2	2	5	3.0
8	Reduced operational deployment duration due to return to civilian job status	8	3	4	3.5	1.4	1	5	4.0
9	Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by ARC	9	2	4	3.4	1.2	1	5	4.0
10	Potential desertion of AMLO, MSAS, and AMOS missions	9	3	3	3.4	1.1	1	5	4.0
11	Negative impact to AD member's career progression and opportunities for success (TFI)	5	6	4	3.2	1.2	1	5	3.0
12	Increased equipment shortfalls due to lack of preparedness/maintenance status	5	6	4	3.1	1.0	1	5	3.0

Table 24 depicts a rank ordered listing based on level of agreement from highest agreement to lowest agreement. As seen in Table 24, the panel agreed the disadvantages of moving CRGs to the ARC include units unable to provide JTF-PO alert coverage, difficulty maintaining training requirements in part-time status, and reduced standardization. The panel expressed less agreement that the disadvantages include potential desertion of other mission sets (AMLO/MSAS/AMOS), negative impacts to AD members' careers, and increased equipment shortfalls.

**Table 25: Question 7 AMOW Results**

RANK	AGREE OR DISAGREE WITH DISADVANTAGES OF AMOW (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Increased cost if moved OCONUS	11	2	2	3.7	1.1	1	5	4.0
2	The majority of CR member's time/training would be used to support the enroute mission	9	4	2	3.7	1.0	2	5	4.0
3	Decreased priority for funding, personnel, and resources	6	4	5	3.0	1.2	1	5	3.0
4	Overwhelmed AMOW/CC that is already burdened by many geographically separated units	5	5	5	2.9	1.3	1	5	3.0
5	CR units would not be directly associated with flying units thus reduced access to aircraft	6	2	7	2.9	1.2	1	5	3.0
6	Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by AMOW/CC	6	1	8	2.8	1.6	1	5	2.0
7	AMOW/CC may not have the unique perspective/knowledge required for CR operations	5	2	8	2.7	1.5	1	5	2.0
8	Too many conflicting mission sets to properly focus on CR mission set	6	1	8	2.7	1.4	1	5	2.0
9	Potential dissolution of AMC's PHOENIX MOBILITY PROGRAM	4	4	7	2.6	1.1	1	4	3.0

Table 25 depicts a rank ordered listing based on level of agreement from highest agreement to lowest agreement. As seen in Table 25, the panel agreed the disadvantages of moving CRGs to an AMOW include increased costs, misuse of CR members' time and

training, and decreased priority for resources. The panel expressed less agreement that the disadvantages include the AMOW/CC's lack of CR knowledge, too many conflicting mission sets, and potential dissolution of the PHOENIX MOBILITY program.

## Question 8

Question 8 asked the panel to rank order the disadvantages of divesting the CRW and organizing the CRGs into an AMW, the ARC, or an AMOW.

**Table 26: Question 8 AMW Results**

RANK	RANK THE DISADVANTAGES OF AMW IN ORDER OF IMPORTANCE (RANKED FROM MOST IMPORTANT TO LEAST IMPORTANT) KENDALL'S W = .39, WEAK/MODERATE AGREEMENT, LOW/FAIR CONFIDENCE				AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Reduced priority or availability of specialized CR training				3.8	1.9	1	8	4.0
2	Reduced CR standardization due to multiple CR units spread among multiple non-CR wings				4.1	3.7	1	12	3.0
3	Decreased priority for funding, personnel, and resources				4.9	1.8	1	8	5.0
4	AMW would use CR equipment for everyday missions thus reducing availability/readiness				4.9	3.0	1	9	5.0
5	The majority of CR member's time/training would be used to support the flying mission				5.3	3.2	1	11	5.0
6	AMW would maintain CR equipment thus reducing CR member's equipment familiarization				5.7	3.0	1	10	6.0
7	Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by AMW/CC				6.0	3.7	2	12	5.0
8	Potential desertion of AMLO, MSAS, and AMOS missions				6.9	2.9	1	11	7.0
9	Mission schizophrenia for in-garrison/CR/airlift missions may cause issues and overburden AMW/CC				7.7	2.3	3	11	8.0
10	AMW/CC may not have the unique perspective/knowledge required for CR operations				8.3	3.1	2	12	9.0
11	18 AF will not focus on CR mission as well as USAF EC is capable of doing (ADCON)				9.3	2.4	3	12	10.0
12	Mission schizophrenia for in-garrison/CR/airlift missions may cause issues and overburden AMW/CC				11.2	1.2	8	12	12.0

Table 26 depicts a rank ordered list of the AMW disadvantages from 1 to 12 with 1 being the most important and 12 being the least important. The panel found weak to moderate agreement with a Kendall's W rating of 0.39. This value indicates low to fair confidence in the panel's rank order listing. The panel concluded the most important disadvantages were reduced priority of specialized CR training, reduced CR standardization, and decreased funding for resources. The least important disadvantages include the lack of AMW/CC's CR knowledge, reduced focus on CR mission by 18 AF, and overburdened AMW/CC due to mission schizophrenia.

**Table 27: Question 8 ARC Results**

RANK	RANK THE DISADVANTAGES OF ARC IN ORDER OF IMPORTANCE (RANKED FROM MOST IMPORTANT TO LEAST IMPORTANT) KENDALL'S W = .48, MODERATE AGREEMENT, FAIR CONFIDENCE				AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	36-hour response time/lack of robust manning would not be conducive to rapid response requirements				1.9	1.3	1	6	2.0
2	ARC units could not provide full time coverage for JTF-PO alert (JTF-PO policy changes needed)				3.5	3.6	1	12	2.0
3	Reduced standardization between CR units				4.9	3.3	1	11	4.0
4	Robust training requirements would be hard to maintain in part-time status				5.0	1.7	2	8	5.0
5	Increased equipment shortfalls due to lack of preparedness/maintenance status				5.3	2.7	1	9	5.0
6	Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by ARC				6.4	3.1	1	11	6.0
7	Potential desertion of AMLO, MSAS, and AMOS missions				7.4	3.0	1	12	7.0
8	Reduced operational deployment duration due to return to civilian job status				7.4	2.0	4	10	8.0
9	Negative impact to AD member's career progression and opportunities for success (TFI)				7.7	2.8	1	11	9.0
10	ARC unit may drop CR mission when another mission set is offered with more political appeal				8.5	2.9	1	12	9.0
11	Inability to support HHQ staff functions similar to an AD wing				8.7	2.1	5	12	8.0
12	Potential dissolution of AMC's PHOENIX MOBILITY PROGRAM				11.0	1.8	7	12	12.0

Table 27 depicts a rank ordered list of the ARC disadvantages from 1 to 12 with 1 being the most important and 12 being the least important. The panel found moderate agreement with a Kendall's W rating of 0.48. This value indicates fair confidence in the panel's rank order listing. The panel concluded the most important disadvantages were inability to meet rapid response capabilities, inability to provide full-time JTF-PO alert coverage, and reduced CR standardization. The least important disadvantages include potential desertion of CR mission set, inability to support HHQ staff functions, and potential dissolution of the PHOENIX MOBILITY program.

**Table 28: Question 8 AMOW Results**

RANK	RANK THE DISADVANTAGES OF AMOW IN ORDER OF IMPORTANCE (RANKED FROM MOST IMPORTANT TO LEAST IMPORTANT) KENDALL'S W = .34, WEAK/MODERATE AGREEMENT, LOW/FAIR CONFIDENCE				AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Decreased priority for funding, personnel, and resources				3.0	2.1	1	8	3.0
2	Too many conflicting mission sets to properly focus on CR mission set				3.3	2.0	1	9	3.0
3	The majority of CR member's time/training would be used to support the enroute mission				3.7	2.4	1	8	3.0
4	Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by AMOW/CC				4.1	2.4	1	8	4.0
5	CR units would not be directly associated with flying units thus reduced access to aircraft				5.4	2.0	2	9	5.0
6	Overwhelmed AMOW/CC that is already burdened by many geographically separated units				5.5	2.3	1	8	6.0
7	AMOW/CC may not have the unique perspective/knowledge required for CR operations				6.1	2.2	1	9	6.0
8	Increased cost if moved OCONUS				6.1	2.3	2	9	6.0
9	Potential dissolution of AMC's PHOENIX MOBILITY PROGRAM				7.9	1.9	3	9	9.0

Table 28 depicts a rank ordered list of the AMOW disadvantages from 1 to 9 with 1 being the most important and 9 being the least important. The panel found weak to moderate

agreement with a Kendall's W rating of 0.34. This value indicates low to fair confidence in the panel's rank order listing. The panel concluded the most important disadvantages were decreased priority for resources, reduced focus on the CR mission due to conflicting mission sets, and misuse of CR member's time/training. The least important disadvantages include lack of AMOW/CC's CR knowledge, increased costs, and the dissolution of the PHOENIX MOBILITY program.

### Question 9

Question 9 asked the panel to agree or disagree with effectiveness and efficiency levels associated with divesting the CRW and moving the CRGs to an AMW, the ARC, or an AMOW.

**Table 29: Question 9 AMW Results**

RANK	AGREE OR DISAGREE WITH AMW EFFECTIVENESS/EFFICIENCY (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Combined units could be less effective but more efficient	8	4	3	3.5	1.4	1	5	4.0
2	Combined units could be less effective and less efficient	6	1	8	2.9	1.4	1	5	2.0
3	Combined units could be more effective and more efficient	5	2	8	2.7	1.4	1	5	2.0
4	Combined units could be more effective but less efficient	3	2	10	2.5	1.1	1	5	2.0
5	Combined units would not change the effectiveness or efficiency of the organization	4	0	11	2.3	1.2	1	4	2.0

Table 29 depicts a rank ordered listing based on level of agreement from highest agreement to lowest agreement. As seen in Table 29, the panel agreed that moving the CRGs to an AMW could be less effective but more efficient. The panel expressed less agreement that this reorganization would not produce changes to efficiency or effectiveness.

**Table 30: Question 9 ARC Results**

RANK	AGREE OR DISAGREE WITH ARC EFFECTIVENESS/EFFICIENCY (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Combined units could be less effective and less efficient	11	1	3	3.8	1.1	2	5	4.0
2	Combined units could be less effective but more efficient	6	3	6	2.9	1.2	1	5	3.0
3	Combined units could be more effective but less efficient	2	2	11	2.3	0.9	1	4	2.0
4	Combined units could be more effective and more efficient	2	0	13	1.8	1.2	1	5	1.0
5	Combined units would not change the effectiveness or efficiency of the organization	0	1	14	1.5	0.6	1	3	1.0

Table 30 depicts a rank ordered listing based on level of agreement from highest agreement to lowest agreement. As seen in Table 30, the panel agreed that moving the CRGs to the ARC could be less effective and less efficient. The panel expressed less agreement that this reorganization would not produce changes to efficiency or effectiveness.

**Table 31: Question 9 AMOW Results**

RANK	AGREE OR DISAGREE WITH AMOW EFFECTIVENESS/EFFICIENCY (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	Combined units could be less effective but more efficient	6	1	8	2.93	1.3	1	5	2.0
2	Combined units could be less effective and less efficient	4	5	6	2.87	1.2	1	5	3.0
3	Combined units could be more effective and more efficient	6	1	8	2.87	1.4	1	5	2.0
4	Combined units could be more effective but less efficient	4	4	7	2.80	1.1	1	5	3.0
5	Combined units would not change the effectiveness or efficiency of the organization	4	1	10	2.33	1.3	1	5	2.0

Table 31 depicts a rank ordered listing based on level of agreement from highest agreement to lowest agreement. As seen in Table 31, the panel agreed that moving the CRGs to an AMOW could be less effective but more efficient. The panel expressed less agreement that this reorganization would not produce changes to efficiency or effectiveness.

### Question 10

Question 10 asked the panel to agree or disagree with a consolidated list of associated issues relevant to the potential divestiture of the CRW.

**Table 32: Question 10 Results**

RANK	AGREE OR DISAGREE WITH ASSOCIATED ISSUES (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	For the CRW to remain, increased manning/resources are needed.	13	1	1	4.4	1.1	1	5	5.0
2	Combined units would greatly increase mission and proficiency training during dwell periods.	12	2	1	4.1	0.9	2	5	4.0
3	Further review is required by AMC to assess the required level of CR capability	13	1	1	4.1	1.0	1	5	4.0
4	Having all CR units maintain a 12 hour response time (per Doc Statement) is unnecessary.	10	5	0	3.9	0.8	3	5	4.0
5	All options have advantages/disadvantages that could be overcome by process/HHQ staff improvements	12	2	1	3.9	0.7	2	5	4.0
6	MSAS units should exist in an ANG CR unit	10	3	2	3.7	1.0	2	5	4.0
7	ARC units cannot support the rapid mobility needs of the CR mission	9	2	4	3.7	1.3	2	5	4.0
8	The standalone CRW has proven its value	8	4	3	3.7	1.2	2	5	4.0
9	Spreading CR skills/mindset to other units has huge dividends for a more agile/smaller USAF	11	0	4	3.7	1.3	1	5	4.0
10	Manning overages would have to be maintained for other organizations to "backup" the CR mission.	9	2	4	3.7	1.2	2	5	4.0
11	The loss of a single CR voice (CRW/CC) to AMC would be a great loss to the CR community	9	1	5	3.5	1.6	1	5	4.0
12	Combined units would enhance responsiveness and communication in times of crisis	7	5	3	3.4	1.0	2	5	3.0
13	The AMLOs, MSAS, and AMOS do not belong in the CRW.	9	1	5	3.4	1.5	1	5	4.0
14	USTC should alter the JTF-PO alert construct thus allowing efficiencies by divesting the CRW	5	6	4	3.3	1.3	1	5	3.0
15	The mission of the CRW is too valuable to risk by divesting CR units to other organizations	7	2	6	3.1	1.4	1	5	3.0
16	Managing Airmen in a more integrated organization would become almost unmanageable	6	4	5	3.0	1.2	1	5	3.0
17	The benefit of a professional/independent CR force outweigh any efficiencies to be gained	5	2	8	2.8	1.3	1	5	2.0
18	Divesting the CRW would improve synergy/capabilities of the mobility enterprise & maintain CR support	5	1	9	2.6	1.5	1	5	2.0
19	More CR capability should reside in the ARC. The ARC/TFI units would require AD support	2	5	8	2.5	1.1	1	5	2.0
20	The current CR construct is a drain on the AMC enterprise in terms of manning/resources	4	2	9	2.5	1.5	1	5	2.0
21	The benefits of a CRW have not been properly realized to justify its existence in times of reduced resources	2	4	9	2.3	1.0	1	4	2.0

Table 32 depicts a rank ordered listing based on level of agreement from highest agreement to lowest agreement. As seen in Table 32, the panel agreed the CRW requires increased manning/resources, the divestiture would increase mission and proficiency training during dwell periods, and further review is required to assess the required level of CR capability. The panel expressed less agreement that more CR capability should reside in the ARC, the current CR construct is a drain on the mobility enterprise, and the benefits of the CRW have not been properly realized to justify its existence.

## Question 11

Question 11 asked the panel to agree or disagree with a consolidated list of potential organizational changes to the CR construct.

**Table 33: Question 11 Results**

RANK	AGREE OR DISAGREE WITH THE ORGANIZATIONAL OPTIONS BELOW (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	The CRW should not be divested.	8	1	6	3.5	1.6	1	5	4.0
2	The CRW should be divested and a smaller core of CRG personnel should be placed in an AMW	8	2	5	3.2	1.5	1	5	4.0
3	The CRW should be divested and the CRGs should be placed in an AMOW w/o a reduction in personnel.	4	4	7	2.7	1.2	1	5	3.0
4	The CRW should be divested and the CRGs should be placed in an AMW w/o a reduction in personnel.	5	2	8	2.6	1.5	1	5	2.0
5	The CRW should be divested and a smaller core of CRG personnel should be placed in an AMOW	4	2	9	2.5	1.2	1	5	2.0
6	The CRW should be divested with an increase to ARC CR capabilities (to include TFI).	1	4	10	2.1	0.9	1	4	2.0
7	The CRW should be divested with an increase to ARC CR capabilities (not to include TFI).	1	1	13	1.9	1.1	1	5	2.0

Table 33 depicts a rank ordered listing based on level of agreement from highest agreement to lowest agreement. As seen in Table 33, the panel agreed the CRW should not be divested. The panel also agreed that if the CRW is divested, the CRGs should be placed in an AMW with a reduction in personnel to fully take advantage of potential efficiencies while maintaining the required CR capabilities. The panel expressed less agreement that the CRW should be divested with a corresponding increase to ARC capabilities.

Further analysis of Question 11 reveals differences between the organizational preferences of the East Coast CRGs versus the West Coast CRGs. As seen in Table 34, the East Coast CRGs agreed that the CRW should be divested and a smaller core of CRG personnel should be placed into an AMW.

**Table 34: Question 11 East Coast Results**

RANK	EAST COAST AGREE OR DISAGREE WITH THE ORGANIZATIONAL OPTIONS BELOW (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	The CRW should be divested and a smaller core of CRG personnel should be placed in an AMW	6	1	1	3.9	1.0	2	5	4.0
2	The CRW should be divested and the CRGs should be placed in an AMW w/o a reduction in personnel.	4	1	3	3.1	1.6	1	5	3.5
3	The CRW should be divested and the CRGs should be placed in an AMOW w/o a reduction in personnel.	3	3	2	3.1	1.2	1	5	3.0

However, Table 35 shows a West Coast CRG preference for not divesting the CRW.

**Table 35: Question 11 West Coast Results**

RANK	WEST COAST AGREE OR DISAGREE WITH THE ORGANIZATIONAL OPTIONS BELOW (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	The CRW should not be divested.	6	0	1	4.3	1.5	1	5	5.0
2	The CRW should be divested and a smaller core of CRG personnel should be placed in an AMW	2	1	4	2.4	1.6	1	5	2.0
3	The CRW should be divested and the CRGs should be placed in an AMOW w/o a reduction in personnel.	1	1	5	2.3	1.0	1	4	2.0

Additional analysis of Question 11 results indicates similar disparities between former commanders and current commanders of the CR units. As seen in Table 36, former commanders agreed the CRW should be divested and a smaller core of CRG personnel should be placed in an AMW.

**Table 36: Question 11 Former CC Results**

RANK	FORMER CC AGREE OR DISAGREE WITH THE ORGANIZATIONAL OPTIONS BELOW (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	The CRW should be divested and a smaller core of CRG personnel should be placed in an AMW	6	1	1	3.8	1.3	1	5	4.0
2	The CRW should be divested and the CRGs should be placed in an AMW w/o a reduction in personnel.	4	1	3	3.1	1.4	1	5	3.5
3	The CRW should be divested and a smaller core of CRG personnel should be placed in an AMOW	3	2	3	3.0	1.3	1	5	3.0

However, Table 37 depicts the current commander preference for not divesting the CRW.

**Table 37: Question 11 Current CC Results**

RANK	CURRENT CC AGREE OR DISAGREE WITH THE ORGANIZATIONAL OPTIONS BELOW (RANKED FROM HIGHEST AGREEMENT TO LOWEST) SAMPLE SIZE NOT STATISTICALLY SIGNIFICANT	AGREE	NEUTRAL	DISAGREE	AVG	STD DEV	RANGE LOW	RANGE HIGH	MED
1	The CRW should not be divested.	5	0	2	4.1	1.5	2	5	5.0
2	The CRW should be divested and a smaller core of CRG personnel should be placed in an AMW	2	1	4	2.6	1.5	1	5	2.0
3	The CRW should be divested and the CRGs should be placed in an AMOW w/o a reduction in personnel.	1	3	3	2.4	1.1	1	4	3.0

## Summary

This chapter reviewed the pertinent statistical analysis of the 11 survey questions from the Round 3 questionnaire. The opinions of the panel were represented by the group mean, standard deviation, range, median, and Kendall's W rating. Some of the questions were further analyzed by separating the panel's answers into two subgroups, current/former commanders and East/West Coast commanders, as a potential method for identifying varying opinions based off of demographics. The analysis did not reveal high levels of concordance among any of the questions; however, it did reveal pertinent and valid information regarding each of the questions. The additional analysis between each of the subgroups revealed potential differences between the subgroups. The litany of information and data derived from this analysis was used in Chapter 5 to form conclusions and recommendations.

## **V. Conclusions and Recommendations**

### **Chapter Overview**

This chapter provides a brief summary of the research conducted. It also explains the significance of the research while also highlighting the limitations of the research.

Additionally, it provides recommendations for future research as a means to further enhance studies relevant to this topic.

### **Summary of Research**

In this study, a diverse group of 15 CR experts, with recent command experience in the CRW, completed three rounds of questionnaires to determine the potential consequences of divesting the CRW. Overall the answers to the various research questions lacked extensive levels of concordance and varied greatly. The variations in the answers were not surprising as panel members commanded during different levels of CR employment, commanded CR units at two different bases, and commanded different types of CR units. Though the opinions varied, the research still provided valuable conclusions.

Overall, the panel recommended the continued existence of the CRW construct and did not recommend divesting the CRGs into any other AF construct. The most significant functions the CRW does well in support of the CRGs are:

1. Enables appropriate levels of readiness/rapid response capabilities
2. Informs senior leaders with a unified voice regarding CR specific issues
3. Provides focus/guidance on the proper organization of CR units

If the decision is made to divest the CRW based on potential fiscal constraints, the panel recommends divesting the CRGs into an AMW. The panel agreed this consolidation would create a less effective but more efficient organization.

The most significant disadvantages of this possible consolidation are:

1. Reduced priority/availability of specialized CR training
2. Reduced CR standardization
3. Decreased priority for funding, personnel, and resources

The most significant advantages of this possible consolidation are:

1. Increased pool of CR trained Airmen for Low Density/High demand AFSCs
2. Improved access to mobility aircraft and synergistic employment support
3. Synergistic long-range scheduling, current operations, and operational planning

Due to the abundant feedback given in Round 1 of the research, Question 10 was generated to gauge the level of agreement on associated issues with divesting or maintaining the CRW. The three most agreed with statements are:

1. The CRW needs increased manning and resources to continue its mission
2. Consolidation would increase mission/proficiency training during dwell periods
3. Further review is required to assess the required level of CR capability

Overall, 8 out of 15 panel members agreed the CRW should not be divested while 1 member remained neutral. Additionally, 8 out of 15 panel members agreed while 2 members remained neutral that the CRW should be divested and efficiencies should be garnered by reducing the number of CRG Airmen and placing them in an AMW. Though the number of

people agreeing for each course of action are similar, the average strength of agreement was higher for maintaining the CRW construct.

### **Significance of Research**

This research serves as a source of validation regarding the current structure of the CR organizations while also providing insight into the consequences of potential future changes. Due to several research limitations and the diversity of responses, this research does not categorically recommend wide-spread organizational changes. This research provides validated information to policy makers as well as a more holistic information base for current and future CR commanders.

This study serves as an additional source of information to guide policy makers as they review potential organizational change. In the event of a return to sequestration, policy changes will most likely be made in an uncertain environment and at an extremely rapid pace. The results of this research serve as a significant first step in the process to determine the best organizational structure of CR forces either in terms of forced changes or the continued evolution and growth of the CR structure. This research provides decision makers with a very specific and diverse information set from operational commanders to help guide strategic-level policy. This information serves as a holistic foundation to ensure senior leaders have the most accurate data points to form their decisions.

Perhaps even more significant, this research may serve as a grade card for the current structure of the CRW. As the organization carries out its current reorganization, this collection of information can provide commanders in the CRW with a wide array of information to better address the concerns and issues within the CRW. It also serves as a positive feedback mechanism for the items the organization is performing well. The analysis of East Coast versus West Coast data sets serves as a potential guide to target command

actions and policy decisions between the two coasts. Further analysis of the former commander's answers versus those of the current commander's answers serves as a potential forecast of prevalent issues that may reoccur once the current high levels of CR employment begin to decrease.

This level of detailed information can serve as a guide for operational commanders to shape their decision making process thus creating the best performing CR forces in any given organizational construct. The strength of the underlying CR Airmen and culture will provide a solid foundation for all potential future changes.

### **Research Limitations**

The intent of the research is to serve as a guide for policy makers as potential structure changes are directed or as CR forces evolve into a more normalized and efficient structure. The research provides historic and diverse data points to decision makers to ensure the most optimal solutions are derived. Though this research is rigorous and holistic, there are a few research limitations worth noting.

It is important to note that several statistical analysis techniques were used to decipher the qualitative information provided by survey respondents. As previously mentioned, this analysis serves as a method to expand one's aperture as they review the information gained from the study. The statistical analysis of individual question's mean, range, median, and standard deviation does not serve as a definitive conclusion regarding the confidence in the sample's responses. The final panel consisted of 15 CR experts which does not meet the minimum small sample size of 30 (McClave, 2011). Seeing as these respondents are considered experts in the field of study, this sample size limitation is normal among Delphi Studies and does not limit the relevancy of the information even though it does limit the applicability of standard statistical analysis methods. Thus, this research used multiple

techniques in an attempt to relay the most significant thoughts and opinions of the expert panel.

Further study limitations exist in reference to the panel of experts. The potential panel members crossed a vast array of professional employees in a broad spectrum of military service. The combination of current command and staff responsibilities, personal time limitations, and operational military requirements greatly reduces the time and effort each panel member can dedicate to the research. Though these limitations exist, the panel members in this research were very dedicated to the study and provided extensive amounts of knowledge and opinions. Even with their dedication to the research, one must note that the validity of the research could be further enhanced if the respondents were given dedicated time and relief from their current duties to fully participate. Though this limitation exists, the commitment of the panel serves as justification for the validity of this research.

An additional limitation of the final analysis is the methodology used to analyze the variances in results between East and West Coast commanders and between former and current commanders. The differences do exist between these study groups and the final recommendations are relevant. However, identifying the potential differences between the two groups earlier in the research process would allow more accurate analysis. The research could have chosen one category of these differences to enhance research fidelity. For example, the Round 3 Questionnaire sent to West Coast commanders would include the statistical averages for all the West Coast commander's Round 2 answers versus the analysis of the entire panel. The Round 3 Questionnaire for the East Coast commander's would include the statistical analysis for the East Coast commander's Round 2 answers. This process would serve as an opportunity to increase the level of concordance within each of the

separate groups within the panel. Though this split panel process is not required, it could potentially provide higher fidelity rank order answers.

Finally, the primary researcher in this study has two years of experience working in the CRW. This experience could serve as a source of bias regarding the development of the questionnaire. Specifically, the results from the Round 1 questionnaire were edited and consolidated to develop the Round 2 questionnaire. This process required the subjective judgement of the researcher to narrow the scope of the Round 2 questionnaire and decipher the key items gathered from Round 1. To reduce the potential influence of personal bias, this research used a group of peers to determine the most relevant responses from the Round 1 questionnaire. Though it is impossible to remove all sources of bias from qualitative analysis, this research used several methods to ensure the most accurate and relevant data points were presented.

### **Recommendations for Future Research**

This research analyzed a few drastic courses of action to reorganize AMC's CR forces due to the severity of potential fiscal constraints and balancing between the Active Duty and Reserve components. This research did not analyze potential incremental courses of action or the potential to increase CR capabilities due to an increasing demand for the CR forces.

An example of an incremental change to the CRW construct gleaned from this research is to remove the AMOS or the MSAS from the CRW construct and place them in a potentially better suited organization. The advantages or disadvantages of this organizational change are speculative in nature. Research regarding the consequences of this change and the proper organization for these squadrons would be of great value to the MAF community.

Another recommendation for future research includes the concept of expanding the CR mission set. Currently AMC's CR forces are very aligned with the GAMSS core

functions required to support the MAF fleet. Several panel members recommended analyzing the potential to expand the core functions of AMC's CR forces to include more robust security forces and civil engineering capabilities similar to the PACAF and USAFE CRGs. This increased capability may serve as a method to increase the utilization rate of CR forces while lessening the demand upon non-CR units.

Finally, a review of the current internal reorganization of CR forces would provide value to the CR community. As the CR forces transition to the new squadron construct, the advantages and disadvantages of this construct could be reviewed to optimize the reorganized units going forward. This future research could include a review of the newly formed organization as compared to the recent constructs to include the older two wing construct.

## **Conclusion**

This research provided valuable insight into the complexity of the CR mission, organization, and potential future organizational structures. The CR community has undergone many strategic, functional, and organizational changes over its brief formal history. The complexity of balancing mission preparedness, functional proficiency, and rapid response is only further complicated by the organizational changes of the past ten years.

The knowledge and concepts of this expert panel should be used to improve the performance of the current CRW construct. The consolidated listing of tasks the CRW performs well and the tasks the CRW could perform better serves as a statistical performance report for the current organization. Reorganization and process improvement efforts should focus on maintaining the high performing tasks while addressing the concerns of current and past commanders.

Furthermore, if the divestiture of the CRW is dictated by senior leaders, this research serves as a roadmap for the consolidation. As a potential consolidation plan is developed, the

benefits and disadvantages found in this research can shape the potential efforts of the decision makers to ensure the maximum amount of CR capability is retained while also maximizing the efficiency of the units involved. This mandated consolidation would be the most successful if the CRGs are placed in an AMW construct as this maintains the most capability while garnering the most efficiencies.

In conclusion, this research indicates that the current construct of a standalone CRW remains the most viable option for the continued effectiveness of the CR mission. The growth of this effectiveness requires a further review of the operational requirements for the entire CR force, the manning and resources to fulfill the requirements, enhanced support from the staff regarding policies and instructions, and improved standardization within the CRW. As the CR mission continues to evolve and normalize, the CRGs should be reorganized into an AMW construct to balance the CR effectiveness with the required efficiencies of the future United States Air Force.

## Glossary of Technical Terms

AD	Active Duty
ADCON	Administrative Control
AFB	Air Force Base
AFIT	Air Force Institute of Technology
AFSC	Air Force Specialty Code
AMC	Air Mobility Command
AMOG	Air Mobility Operations Group
AMOS	Air Mobility Operations Squadron
AMOW	Air Mobility Operations Wing
AMW	Air Mobility Wing
ANG	Air National Guard
ARC	Active Reserve Component
ASAM	Advanced Study of Air Mobility
BOS	Base Operating Support
COA	Course of Action
CONOPS	Concept of Operations
CR	Contingency Response
CRE	Contingency Response Element
CRF	Contingency Response Force
CRS	Contingency Response Squadron
CRW	Contingency Response Wing
CRG	Contingency Response Group
CSAF	Chief of Staff of the Air Force
DoD	Department of Defense
EMTF	Expeditionary Mobility Task Force
FGO	Field Grade Officer
GAMSS	Global Air Mobility Support System
GMS	Global Mobility Squadron
GMRS	Global Mobility Readiness Squadron
GRL	Global Reach Laydown
ISIL	Islamic State of Iraq and the Levant
JB-MDL	Joint Base McGuire-Dix-Lakehurst
JTF-PO	Joint Task Force Port Opening
MAF	Mobility Air Forces
MSAS	Mobility Support Advisor Squadron
MST	Mobility Support Team
OPCON	Operational Control
PACAF	Pacific Air Forces
SME	Subject Matter Expert
TACC	Tanker Airlift Control Center
TALCE	Tanker Airlift Control Element
TFC	Total Force Continuum
USAF	United States Air Force
USAF EC	United States Air Force Expeditionary Center
USAFE	United States Air Forces Europe

## Appendix A. Round One Questionnaire

### Questionnaire #1: Initial Survey

#### Consolidating AMC's Contingency Response Capabilities

You are receiving this questionnaire as your current or past role as a [Unit] Commander in the 621st Contingency Response Wing (CRW) has identified you as a Contingency Response expert. *The purpose of this research is to conduct a qualitative study in an effort to evaluate the efficiency and effectiveness of the standalone CRW versus the possibility of consolidating CR units into other Air Force Wings.*

#### Background:

With the potential return of sequestration in FY16, Headquarters Air Force (HAF) and Air Mobility Command (AMC) may seek to further streamline organizations due to a reduced budget and force size. One such option is to consolidate AMC's Contingency Response Groups into existing non-CR Active Duty Wings, thus eliminating the standalone CRW. Additionally, analysis performed by the Total Force Continuum may recommend to move more CR capabilities to the Reserve or Guard Components. There may be manpower efficiencies or other mission benefits with consolidation; however, it may also be prohibitive. Please use this opportunity to define the potential intended and unintended consequences of this consolidation (to include the effects on units other than the traditional CR Squadrons i.e. GSS, AMOS, or MSAS).

Your inputs will be used to form recommendations for senior leaders at AMC and HAF to shape the future construct of AMC's Contingency Response units. Your experiences are being used to analyze the current structure of the CRW during various levels of CR utilization and funding. The intent of this research is to determine the optimal and enduring structure of CR units by identifying the current strengths of and recommended improvements to the existing construct as well as analyzing potential positive and negative consequences of an alternative construct.

This research problem is broad and complex with many potential consequences. The Delphi survey methodology is an iterative communication process with subject matter experts. As a panel member, you will be given the opportunity to provide your expert opinions as well as analyze and rate a consolidated review of your fellow panel member's opinions. By combining your extensive knowledge on the CR mission and organization with the iterative methodologies found in the Delphi study, I plan to offer a concise and clear recommendation for the future organization of CR units in AMC. Thank you in advance for committing your time and efforts into providing candid responses for the benefit of the entire CR community.

#### Please note the following:

Benefits and risks: There are no personal benefits or risks for participating in this study. Your participation in this questionnaire should take less than 30 minutes per round.

Confidentiality: Questionnaire responses are confidential. Strict protocols will be maintained to ensure your identity and current unit will not be associated with your responses. Individual responses will not be publically reported. Aggregate data will be analyzed and published in the final report. Individual names and responses will be password protected at all times and will only be shared by the researcher and academic advisor as set forth by the Air Force Institute of Technology (AFIT) security protocols. At the conclusion of the study, all individual responses will be submitted to the AFIT advisor and all other copies obtained by the researcher will be destroyed.

Voluntary consent: Your participation in this study is completely voluntary. You have the right to decline to answer any question, refuse to participate, or withdraw from the panel at any time. Your decision of whether or not to participate will not result in any penalty or loss. Completion of the questionnaire implies your consent to participate.

BRAD P. BOWYER, Major, USAF  
IDE Student, Advanced Study of Air Mobility  
USAF Expeditionary Center  
JB McGuire-Dix-Lakehurst, NJ  
DSN 312-650-7320  
Cell 843-864-7657

JOSEPH R. HUSCROFT, Lieutenant Colonel, USAF  
Deputy Department Head  
Department of Operational Sciences  
Air Force Institute of Technology  
Wright-Patterson AFB, OH  
Voice: 937-255-3636 (785-3636 DSN) ext 4533

The sponsor for this research is Ms. Kimberly Corcoran, the Director of Staff of the United States Air Force Expeditionary Center at Joint Base McGuire-Dix-Lakehurst, New Jersey.

**Process:**

1. Please complete this survey **electronically** and return it as an email attachment to: [brad.bowyer@us.af.mil](mailto:brad.bowyer@us.af.mil) no later than **Thursday, 22 January 2015**. If you have questions, I can be reached at CELL 843-864-7657 or via DSN 650-7320.

2. This questionnaire is an instrument of a Delphi study. The results of this questionnaire will be used to develop the follow on questionnaires approximately 1 month between each session. The process continues until consensus is reached or until thorough subject knowledge is attained. This questionnaire is non-attributional, so please fully elaborate on your responses. All research is intended to be completed by March 2015.

**Research questions:**

**Please answer the following questions as clearly and concisely as possible without omitting critical information required for the group to consider in follow on questionnaires. Provide any appropriate rationale for your responses.**

1. What functions/duties does the 621 CRW perform well in support of the four AMC CRGs?
2. What functions/duties could the 621 CRW perform better in support of the four AMC CRGs?
3. List or describe the potential positives of divesting the CRW and incorporating the CRGs into an Airlift/Air Mobility Wing or Reserve/Guard unit to include potential associate units.
  - Airlift/Air Mobility Wing:
  - Reserve/Guard Unit (including associate units):
  - Other (ABW, AMOW, etc.):
4. List or describe the potential negatives of divesting the CRW and incorporating the CRGs into an Airlift/Air Mobility Wing or Reserve/Guard unit.
  - Airlift/Air Mobility Wing:
  - Reserve/Guard Unit (including associate units):
  - Other (ABW, AMOW, etc.):
5. Please analyze the effectiveness and efficiencies of incorporating the CRGs into an existing Airlift/Air Mobility Wing or Reserve/Guard Wing. Please cite specific reasons for your opinion.

## Appendix B. Round Two Questionnaire

### Questionnaire #2: Follow Up Survey Consolidating AMC's Contingency Response Capabilities

You are receiving this questionnaire as a Contingency Response expert that responded to Questionnaire #1 of this research. *The purpose of this research is to conduct a qualitative study in an effort to evaluate the efficiency and effectiveness of the standalone CRW versus the possibility of consolidating CR units into other Air Force Wings.*

#### Background:

With the potential return of sequestration in FY16, Headquarters Air Force (HAF) and Air Mobility Command (AMC) may seek to further streamline organizations due to a reduced budget and force size. One such option is to consolidate AMC's Contingency Response Groups into existing non-CR Active Duty Wings, thus eliminating the standalone CRW. Additionally, analysis performed by the Total Force Continuum may recommend to move more CR capabilities to the Reserve or Guard Components. There may be manpower efficiencies or other mission benefits with consolidation; however, it may also be prohibitive. Please use this opportunity to define the potential intended and unintended consequences of this consolidation (to include the effects on units other than traditional CR Squadrons i.e. GSS, AMOS, or MSAS).

Your inputs will be used to form recommendations for senior leaders at AMC and HAF to shape the future construct of AMC's Contingency Response units. Your experiences are being used to analyze the current structure of the CRW during various levels of CR utilization and funding. The intent of this research is to determine the optimal and enduring structure of CR units by identifying the current strengths of and recommended improvements to the existing construct as well as analyzing potential positive and negative consequences of an alternative construct.

This research problem is broad and complex with many potential consequences. The Delphi survey methodology is an iterative communication process with subject matter experts. As a panel member, you will be given the opportunity to provide your expert opinions as well as analyze and rate a consolidated review of your fellow panel member's opinions. By combining your extensive knowledge on the CR mission and organization with the iterative methodologies found in the Delphi study, I plan to offer a concise and clear recommendation for the future organization of CR units in AMC. Thank you in advance for committing your time and efforts into providing candid responses for the benefit of the entire CR community.

#### Please note the following:

Benefits and risks: There are no personal benefits or risks for participating in this study. Your participation in this questionnaire should take less than 30 minutes per round.

Confidentiality: Questionnaire responses are confidential. Strict protocols will be maintained to ensure your identity and current unit will not be associated with your responses. Individual responses will not be publically reported. Aggregate data will be analyzed and published in the final report. Individual names and responses will be password protected at all times and will only be shared by the researcher and academic advisor as set forth by the Air Force Institute of Technology (AFIT) security protocols. At the conclusion of the study, all individual responses will be submitted to the AFIT advisor and all other copies obtained by the researcher will be destroyed.

Voluntary consent: Your participation in this study is completely voluntary. You have the right to decline to answer any question, refuse to participate, or withdraw from the panel at any time. Your decision of whether or not to participate will not result in any penalty or loss. Completion of the questionnaire implies your consent to participate.

BRAD P. BOWYER, Major, USAF  
IDE Student, Advanced Study of Air Mobility  
USAF Expeditionary Center  
JB McGuire-Dix-Lakehurst, NJ  
DSN 312-650-7320  
Cell 843-864-7657

JOSEPH R. HUSCROFT, Lieutenant Colonel, USAF  
Deputy Department Head  
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The sponsor for this research is Ms. Kimberly Corcoran, the Director of Staff of the United States Air Force Expeditionary Center at Joint Base McGuire-Dix-Lakehurst, New Jersey.

**Process:**

1. Please complete this survey **electronically** and return it as an email attachment to: [brad.bowyer@us.af.mil](mailto:brad.bowyer@us.af.mil) no later than **Wednesday, 1 April 2015**. If you have questions, I can be reached at CELL 843-864-7657 or via DSN 650-7320.

2. This questionnaire is an instrument of a Delphi study. The results of this questionnaire will be used to develop the follow on questionnaires approximately one month between each session. The process continues until consensus is reached or until thorough subject knowledge is attained. This questionnaire is non-attributional, so please fully elaborate on your responses. All research is intended to be completed by May 2015.

3. A plethora of ideas and opinions were received in the first round. To contain the scope of this research and produce a succinct and relevant product, the responses that occurred most frequently are included in Round 2 of this research. Please continue giving candid feedback and other comments as this research is ultimately designed to optimize CR organization.

**Research questions:**

**Please answer the following questions to the best of your ability. Also, please take advantage of the optional comments section to clarify your answers, offer new ideas, or for any additional comments.**

1. In Round 1 of this survey, I asked the panel “what functions/duties does the 621 CRW **perform well in support** of the four AMC CRGs?” The panel provided the key functions/duties below. Please use the Likert Scale provided to measure the degree to which you agree or disagree with each key item.

- 5 = Strongly Agree  
4 = Agree  
3 = Undecided  
2 = Disagree  
1 = Strongly Disagree

**The 621 CRW performs the following functions/duties well...**

- ☐ Provides support for exercise planning/synchronization and other unit-level training events
- ☐ Synergizes unity of effort and communication between individual Active Duty (AD) CR units
- ☐ Expedites “shortfalls”/backfills of personnel/equipment for operational/training events
- ☐ Informs senior leaders with a unified voice regarding CR specific issues
- ☐ Compliments AMC staff-level functions to get CR issues standardized, codified, and staffed
- ☐ Provides focus/guidance on how to properly organize/reorganize CR units
- ☐ Enables appropriate levels of readiness/rapid response capabilities
- ☐ Evaluates mission capabilities with robust IG program
- ☐ Enables proper evaluation standards/processes (Stan/Eval Programs)
- ☐ Advances strategic-level CR mission development and maturation of CR concepts
- ☐ Protects CR units from the “skeletonization” of manpower/equipment ISO other in-garrison units

Optional: Please enter additional comments below

2. In addition to the above Likert Scale, please rank order the 11 key items from question #1 with 1 being the most important item and 11 being the least important item.

**The 621 CRW performs the following functions/duties well...**

- ☐ Provides support for exercise planning/synchronization and other unit-level training events
- ☐ Synergizes unity of effort and communication between individual Active Duty (AD) CR units
- ☐ Expedites “shortfalls”/backfills of personnel/equipment for operational/training events
- ☐ Informs senior leaders with a unified voice regarding CR specific issues
- ☐ Compliments AMC staff-level functions to get CR issues standardized, codified, and staffed
- ☐ Provides focus/guidance on how to properly organize/reorganize CR units
- ☐ Enables appropriate levels of readiness/rapid response capabilities
- ☐ Evaluates mission capabilities with robust IG program
- ☐ Enables proper evaluation standards/processes (Stan/Eval Programs)
- ☐ Advances strategic-level CR mission development and maturation of CR concepts
- ☐ Protects CR units from the “skeletonization” of manpower/equipment ISO other in-garrison units

Optional: Please enter additional comments below

3. In Round 1 of this survey, I asked the panel “what functions/duties could the 621 CRW **perform better in support** of the four AMC CRGs”. The panel provided the key functions/duties below. Please use the Likert Scale provided to measure the degree to which you agree or disagree with each key item.

5 = Strongly Agree  
4 = Agree  
3 = Undecided  
2 = Disagree  
1 = Strongly Disagree

**The 621 CRW could perform the following functions/duties better...**

- ☐ Coordinate robust training opportunities/venues (i.e. FEMA/NORTHCOM/COCOM exercises)
- ☐ Establish better working agreements with base partners
  - Improve aircraft access for mx/port
  - Establish MOAs for training/operational activities
  - Enhance functional training for Low Density/High Demand AFSCs (Fuels, Finance, etc.)
  - Use host wing support AFSCs vs CRW AFSCs for daily needs (JAG, Finance, Personnel, etc.)
- ☐ Enhance standardization among the CR units (training, manning, readiness, processes)
- ☐ Improve representation to HHQ for current/future resources (manpower, equipment, funding)
- ☐ Advocate for more meaningful/current policy (AFIs, reference material, checklists)
- ☐ Improve CR Marketing and Education to other COCOMs/MAJCOMs
- ☐ Improve internal mission tasking process (Wing XP/WOC Process)
- ☐ Improve administrative responsibilities (taskings, project POCs, evaluations, cross-coast coordination)
- ☐ Advocate for manning as an operational unit (crew ratio vs rated staff process and UTC manning)
- ☐ Focus on strategic staff work that will improve/support the organization vs operational issues
- ☐ Provide standardized deployment/logistics functions (equipment management/UDM functions)
- ☐ Advocate for CR-specific equipment UTCs vs seeking AF-wide consensus for UTC changes

Optional: Please enter additional comments below

4. In addition to the above Likert Scale, please rank order the 12 key items from question #3 with 1 being the most important item and 12 being the least important item.

**The 621 CRW could perform the following functions/duties better...**

- ☐ Coordinate robust training opportunities/venues (i.e. FEMA/NORTHCOM/COCOM exercises)
- ☐ Establish better working agreements with base partners
  - Improve aircraft access for mx/port
  - Establish MOAs for training/operational activities
  - Enhance functional training for Low Density/High Demand AFSCs (Fuels, Finance, etc.)
  - Use host wing support AFSCs vs CRW AFSCs for daily needs (JAG, Finance, Personnel, etc.)
- ☐ Enhance standardization among the CR units (training, manning, readiness, processes)
- ☐ Improve representation to HHQ for current/future resources (manpower, equipment, funding)
- ☐ Advocate for more meaningful/current policy (AFIs, reference material, checklists)
- ☐ Improve CR Marketing and Education to other COCOMs/MAJCOMs
- ☐ Improve internal mission tasking process (Wing XP/WOC Process)
- ☐ Improve administrative responsibilities (taskings, project POCs, evaluations, cross-coast coordination)
- ☐ Advocate for manning as an operational unit (crew ratio vs rated staff process and UTC manning)
- ☐ Focus on strategic staff work that will improve/support the organization vs operational issues
- ☐ Provide standardized deployment/logistics functions (equipment management/UDM functions)
- ☐ Advocate for CR-specific equipment UTCs vs seeking AF-wide consensus for UTC changes

Optional: Please enter additional comments below

5. In Round 1 of this survey, I asked the panel to “list or describe the **potential positives** of divesting the CRW and incorporating the CRGs into an Airlift/Air Mobility Wing or Reserve/Guard unit to include potential associate units.” The panel provided the key items below. Please use the Likert Scale provided to measure the degree to which you agree or disagree with each key item.

**NOTE: For the sections titled “Other”, responses were only given for the AMOW so the title has been changed accordingly and all comments are directly related to positives/negatives associated with the AMOW.**

**NOTE: For consistency of voting, please assume that the Airlift/Air Mobility Wing exists at a traditional Air Force Base versus a Joint Base. This will help ensure answers assume a similar organizational structure.**

- 5 = Strongly Agree
- 4 = Agree
- 3 = Undecided
- 2 = Disagree
- 1 = Strongly Disagree

**Airlift/Air Mobility Wing (Traditional Mobility Wing not a Joint Base structure) could provide these advantages:**

- \_\_\_\_\_ Increased pool of CR trained Airmen especially for Low Density High Demand AFSCs such as contractors, Airfield Managers, CE, etc. (Assumes policy directing some AMW assets are required to maintain a basic CR qualification similar to the FFGRL Medical Team)
- \_\_\_\_\_ Synergistic long-range scheduling, current operations, and operational planning
- \_\_\_\_\_ Improved access to mobility aircraft and synergistic training, exercise, and deployment support
- \_\_\_\_\_ Streamlined administrative/staff support (performance reports, taskings, discipline, PA, Protocol, JAG)
- \_\_\_\_\_ Improved AFSC-specific functional proficiency and increased efficiency/flexibility for both units
- \_\_\_\_\_ Further manpower/funding reductions by eliminating redundant positions
- \_\_\_\_\_ Allows AMW members to become more knowledgeable of unique CR mission set/requirements
- \_\_\_\_\_ Reduced seams and tensions between tenant/host wings
- \_\_\_\_\_ Enhanced cross-flow, career progression, and ability to develop Airmen
- \_\_\_\_\_ Collocated and centrally managed/maintained equipment
- \_\_\_\_\_ Increased expertise (CR functional SMEs) available to benefit AMW organizations (LRS, SF, CE)
- \_\_\_\_\_ Eliminating ADCON/OPCON split between 18 AF/USAF EC would improve command & control

**Reserve/Guard Unit (Majority of CR capability to ARC, TFI, or all to ARC) could provide these advantages:**

- \_\_\_\_\_ Enhanced utilization, specific training, and improved relationships for HA/DR missions
- \_\_\_\_\_ HA/DR missions would have a high level of volunteerism due to proximity and disaster lead time
- \_\_\_\_\_ Increased CR mission focus as many of the non-CR in-garrison functions are not as prevalent
- \_\_\_\_\_ Reduced resources for initial training requirements as a result of reduced personnel turnover
- \_\_\_\_\_ Increased continuity and mission expertise/corporate knowledge
- \_\_\_\_\_ Reduced risk for posse comitatus issues and increased acceptance by state disaster entities
- \_\_\_\_\_ Reduced cost for day-to-day operations (smaller daily in-garrison footprint) and per person costs
- \_\_\_\_\_ TFI organization could balance efficiency/effectiveness trade off due to ARC and AD balance
- \_\_\_\_\_ Increased AD rated manning for flying units and staff positions due to AD CR force reduction
- \_\_\_\_\_ Reserve members could serve as training specialists/evaluators ISO AD CR during high turnover

**Air Mobility Operations Wing could provide these advantages:**

- \_\_\_\_\_ Improved AMC forward presence/closer to geographic need thus guaranteeing faster response time
- \_\_\_\_\_ Enhanced geographic focus allows more in-depth training/planning/relationship building
- \_\_\_\_\_ Allows current ARC units to prioritize HA/DR mission while AMOW CR units maintain global focus
- \_\_\_\_\_ Allows AMOW members to become more knowledgeable of CR mission set/requirements
- \_\_\_\_\_ Further manpower/funding reductions by eliminating redundant positions
- \_\_\_\_\_ Improved AFSC-specific functional proficiency and increased efficiency/flexibility for both units
- \_\_\_\_\_ Enhanced cross-flow, career progression, and ability to develop Airmen
- \_\_\_\_\_ Improved advocacy for in-garrison support

Optional: Please enter additional comments below

6. In addition to the above Likert Scale, please rank order the key items for each section from question #5 with 1 being the most important item.

**The potential positives of divesting the CRW and incorporating the CRGs into an:**

**Airlift/Air Mobility Wing (Traditional Mobility Wing not a Joint Base structure): (Rank Order 1-12)**

- \_\_\_\_\_ Increased pool of CR trained Airmen especially for Low Density High Demand AFSCs such as contractors, Airfield Managers, CE, etc. (Assumes policy directing some AMW assets are required to maintain a basic CR qualification similar to the FFGRL Medical Team)
- \_\_\_\_\_ Synergistic long-range scheduling, current operations, and operational planning
- \_\_\_\_\_ Improved access to mobility aircraft and synergistic training, exercise, and deployment support
- \_\_\_\_\_ Streamlined administrative/staff support (performance reports, taskings, discipline, PA, Protocol, JAG)
- \_\_\_\_\_ Improved AFSC-specific functional proficiency and increased efficiency/flexibility for both units
- \_\_\_\_\_ Further manpower/funding reductions by eliminating redundant positions
- \_\_\_\_\_ Allows AMW members to become more knowledgeable of unique CR mission set/requirements
- \_\_\_\_\_ Reduced seams and tensions between tenant/host wings
- \_\_\_\_\_ Enhanced cross-flow, career progression, and ability to develop Airmen
- \_\_\_\_\_ Collocated and centrally managed/maintained equipment
- \_\_\_\_\_ Increased expertise (CR functional SMEs) available to benefit AMW organizations (LRS, SF, CE)
- \_\_\_\_\_ Eliminating ADCON/OPCON split between 18 AF/USAF EC would improve command and control

**Reserve/Guard Unit (Majority of CR capability to ARC, TFI, or all to ARC): (Rank Order 1-10)**

- \_\_\_\_\_ Enhanced utilization, specific training, and improved relationships for HA/DR missions
- \_\_\_\_\_ HA/DR missions would have a high level of volunteerism due to proximity and disaster lead time
- \_\_\_\_\_ Increased CR mission focus as many of the non-CR in-garrison functions are not as prevalent
- \_\_\_\_\_ Reduced resources for initial training requirements as a result of reduced personnel turnover
- \_\_\_\_\_ Increased continuity and mission expertise/corporate knowledge
- \_\_\_\_\_ Reduced risk for posse comitatus issues and increased acceptance by state disaster entities
- \_\_\_\_\_ Reduced cost for day-to-day operations (smaller daily in-garrison footprint) and per person costs
- \_\_\_\_\_ TFI organization could balance efficiency/effectiveness trade off due to ARC and AD balance
- \_\_\_\_\_ Increased AD rated manning for flying units and staff positions due to AD CR force reduction
- \_\_\_\_\_ Reserve members could serve as training specialists/evaluators ISO AD CR during high turnover

**Air Mobility Operations Wing: (Rank Order 1-8)**

- \_\_\_\_\_ Improved AMC forward presence/closer to geographic need thus guaranteeing faster response time
- \_\_\_\_\_ Enhanced geographic focus allows more in-depth training/planning/relationship building
- \_\_\_\_\_ Allows current ARC units to prioritize HA/DR mission while AMOW CR units maintain global focus
- \_\_\_\_\_ Allows AMOW members to become more knowledgeable of CR mission set/requirements
- \_\_\_\_\_ Further manpower/funding reductions by eliminating redundant positions
- \_\_\_\_\_ Improved AFSC-specific functional proficiency and increased efficiency/flexibility for both units
- \_\_\_\_\_ Enhanced cross-flow, career progression, and ability to develop Airmen
- \_\_\_\_\_ Improved advocacy for in-garrison support

Optional: Please enter additional comments below

7. In Round 1 of this survey, I asked the panel to “list or describe the **potential negatives** of divesting the CRW and incorporating the CRGs into an Airlift/Air Mobility Wing or Reserve/Guard unit to include potential associate units.” The panel provided the key items below. Please use the Likert Scale provided to measure the degree to which you agree or disagree with each key item.

- 5 = Strongly Agree
- 4 = Agree
- 3 = Undecided
- 2 = Disagree
- 1 = Strongly Disagree

**Airlift/Air Mobility Wing (Traditional Mobility Wing not Joint Base structure) could provide these disadvantages:**

- \_\_\_\_\_ Reduced priority or availability of specialized CR training
- \_\_\_\_\_ Reduced CR standardization due to multiple CR units spread among multiple non-CR wings
- \_\_\_\_\_ The majority of CR member’s time/training would be used to support the flying mission
- \_\_\_\_\_ Decreased priority for funding, personnel, and resources
- \_\_\_\_\_ Potential desertion of AMLO, MSAS, and AMOS missions
- \_\_\_\_\_ AMW would use CR equipment for everyday missions thus reducing availability/readiness
- \_\_\_\_\_ AMW would maintain CR equipment thus reducing CR member’s equipment familiarization
- \_\_\_\_\_ Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by AMW/CC
- \_\_\_\_\_ AMW/CC may not have the unique perspective/knowledge required for CR operations
- \_\_\_\_\_ Potential dissolution of AMC’s PHOENIX MOBILITY PROGRAM
- \_\_\_\_\_ Mission schizophrenia for in-garrison/CR/airlift missions may cause issues and overburden AMW/CC
- \_\_\_\_\_ 18 AF will not focus on CR mission as well as USAF EC is capable of doing (ADCON)

**Reserve/Guard Unit (Majority of CR capability to ARC, TFI, or all to ARC) could provide these disadvantages:**

- \_\_\_\_\_ 36-hour response time/lack of robust manning would not be conducive to rapid response requirements
- \_\_\_\_\_ ARC units could not provide full time coverage for JTF-PO alert (JTF-PO policy changes needed)
- \_\_\_\_\_ Increased equipment shortfalls due to lack of preparedness/maintenance status
- \_\_\_\_\_ Negative impact to AD member’s career progression and opportunities for success (TFI)
- \_\_\_\_\_ Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by ARC
- \_\_\_\_\_ Potential desertion of AMLO, MSAS, and AMOS missions
- \_\_\_\_\_ Reduced standardization between CR units
- \_\_\_\_\_ Robust training requirements would be hard to maintain in part-time status
- \_\_\_\_\_ Potential dissolution of AMC’s PHOENIX MOBILITY PROGRAM
- \_\_\_\_\_ Reduced operational deployment duration due to return to civilian job status
- \_\_\_\_\_ Inability to support HHQ staff functions similar to an AD wing
- \_\_\_\_\_ ARC unit may drop CR mission when another mission set is offered with more political appeal

**Air Mobility Operations Wing could provide these disadvantages:**

- \_\_\_\_\_ Too many conflicting mission sets to properly focus on CR mission set
- \_\_\_\_\_ The majority of CR member’s time/training would be used to support the enroute mission
- \_\_\_\_\_ Decreased priority for funding, personnel, and resources
- \_\_\_\_\_ Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by AMOW/CC
- \_\_\_\_\_ AMOW/CC may not have the unique perspective/knowledge required for CR operations
- \_\_\_\_\_ Overwhelmed AMOW/CC that is already burdened by many geographically separated units
- \_\_\_\_\_ Potential dissolution of AMC’s PHOENIX MOBILITY PROGRAM
- \_\_\_\_\_ CR units would not be directly associated with flying units thus reduced access to aircraft
- \_\_\_\_\_ Increased cost if moved OCONUS

Optional: Please enter additional comments below

8. In addition to the above Likert Scale, please rank order the key items for each section from question #7 with 1 being the most important item.

**The potential negatives of divesting the CRW and incorporating the CRGs into an:**

**Airlift/Air Mobility Wing (Traditional Mobility Wing not a Joint Base structure): (Rank Order 1-12)**

- \_\_\_\_\_ Reduced priority or availability of specialized CR training
- \_\_\_\_\_ Reduced CR standardization due to multiple CR units spread among multiple non-CR wings
- \_\_\_\_\_ The majority of CR member's time/training would be used to support the flying mission
- \_\_\_\_\_ Decreased priority for funding, personnel, and resources
- \_\_\_\_\_ Potential desertion of AMLO, MSAS, and AMOS missions
- \_\_\_\_\_ AMW would use CR equipment for everyday missions thus reducing availability/readiness
- \_\_\_\_\_ AMW would maintain CR equipment thus reducing CR member's equipment familiarization
- \_\_\_\_\_ Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by AMW/CC
- \_\_\_\_\_ AMW/CC may not have the unique perspective/knowledge required for CR operations
- \_\_\_\_\_ Potential dissolution of AMC's PHOENIX MOBILITY PROGRAM
- \_\_\_\_\_ Mission schizophrenia for in-garrison/CR/airlift missions may cause issues and overburden AMW/CC
- \_\_\_\_\_ 18 AF will not focus on CR mission as well as USAF EC is capable of doing (ADCON)

**Reserve/Guard Unit (Majority of CR capability to ARC, TFI, or all to ARC): (Rank Order 1-12)**

- \_\_\_\_\_ 36-hour response time/lack of robust manning would not be conducive to rapid response requirements
- \_\_\_\_\_ ARC units could not provide full time coverage for JTF-PO alert (JTF-PO policy changes needed)
- \_\_\_\_\_ Increased equipment shortfalls due to lack of preparedness/maintenance status
- \_\_\_\_\_ Negative impact to AD member's career progression and opportunities for success (TFI)
- \_\_\_\_\_ Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by ARC
- \_\_\_\_\_ Potential desertion of AMLO, MSAS, and AMOS missions
- \_\_\_\_\_ Reduced standardization between CR units
- \_\_\_\_\_ Robust training requirements would be hard to maintain in part-time status
- \_\_\_\_\_ Potential dissolution of AMC's PHOENIX MOBILITY PROGRAM
- \_\_\_\_\_ Reduced operational deployment duration due to return to civilian job status
- \_\_\_\_\_ Inability to support HHQ staff functions similar to an AD wing
- \_\_\_\_\_ ARC unit may drop CR mission when another mission set is offered with more political appeal

**Air Mobility Operations Wing: (Rank Order 1-9)**

- \_\_\_\_\_ Too many conflicting mission sets to properly focus on CR mission set
- \_\_\_\_\_ The majority of CR member's time/training would be used to support the enroute mission
- \_\_\_\_\_ Decreased priority for funding, personnel, and resources
- \_\_\_\_\_ Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by AMOW/CC
- \_\_\_\_\_ AMOW/CC may not have the unique perspective/knowledge required for CR operations
- \_\_\_\_\_ Overwhelmed AMOW/CC that is already burdened by many geographically separated units
- \_\_\_\_\_ Potential dissolution of AMC's PHOENIX MOBILITY PROGRAM
- \_\_\_\_\_ CR units would not be directly associated with flying units thus reduced access to aircraft
- \_\_\_\_\_ Increased cost if moved OCONUS

Optional: Please enter additional comments below

9. In Round 1 of this survey, I asked the panel to analyze the **effectiveness and efficiencies** of incorporating the CRGs into an existing Airlift/Air Mobility Wing or Reserve/Guard Wing. The panel provided the key items below. Please use the Likert Scale provided to measure the degree to which you agree or disagree with each key item.

- 5 = Strongly Agree
- 4 = Agree
- 3 = Undecided
- 2 = Disagree
- 1 = Strongly Disagree

**Airlift/Air Mobility Wing (Traditional Mobility Wing not a Joint Base structure):**

- \_\_\_\_\_ Combined units could be more effective and more efficient
- \_\_\_\_\_ Combined units could be more effective but less efficient
- \_\_\_\_\_ Combined units could be less effective but more efficient
- \_\_\_\_\_ Combined units could be less effective and less efficient
- \_\_\_\_\_ Combined units would not change the effectiveness or efficiency of the organization

**Reserve/Guard Unit (Majority of CR capability to ARC, TFI, or all to ARC):**

- \_\_\_\_\_ Combined units could be more effective and more efficient
- \_\_\_\_\_ Combined units could be more effective but less efficient
- \_\_\_\_\_ Combined units could be less effective but more efficient
- \_\_\_\_\_ Combined units could be less effective and less efficient
- \_\_\_\_\_ Combined units would not change the effectiveness or efficiency of the organization

**Air Mobility Operations Wing:**

- \_\_\_\_\_ Combined units could be more effective and more efficient
- \_\_\_\_\_ Combined units could be more effective but less efficient
- \_\_\_\_\_ Combined units could be less effective but more efficient
- \_\_\_\_\_ Combined units could be less effective and less efficient
- \_\_\_\_\_ Combined units would not change the effectiveness or efficiency of the organization

Optional: Please enter additional comments below

10. Round 1 of this survey discovered many associated issues with divesting or maintaining the CRW. This question attempts to highlight several of the issues not captured above. Please use the Likert Scale provided to measure the degree to which you agree or disagree with each key item.

5 = Strongly Agree  
4 = Agree  
3 = Undecided  
2 = Disagree  
1 = Strongly Disagree

**Associated issued with divesting or maintaining CRW:**

- \_\_\_\_\_ The current CR construct is a drain on the AMC enterprise in terms of manning/resources
- \_\_\_\_\_ For the CRW to remain, increased manning/resources are needed. The CRW has outdated equipment, too many broken UTCs, is not manned to cover overhead items (on loan/Wg Staff), and is not properly supported by HHQ
- \_\_\_\_\_ Combined units would greatly increase mission and proficiency training during dwell periods. Dwell periods are the most difficult time to justify the CRW and keep unit morale high
- \_\_\_\_\_ Divesting the CRW would improve synergy/capabilities of entire mobility enterprise while maintaining required CR support
- \_\_\_\_\_ The loss of a single CR voice (CRW/CC) to AMC would be a great loss to the CR community
- \_\_\_\_\_ Both standalone CRW and combined units have advantages/disadvantages that could be overcome with proper processes and HHQ staff improvements
- \_\_\_\_\_ The mission of the CRW is too valuable to risk by divesting CR units to other organizations
- \_\_\_\_\_ USTC should alter the JTF-PO alert construct thus allowing efficiencies by divesting the CRW
- \_\_\_\_\_ Spreading CR skills/mindset to other units has huge dividends for a more agile/smaller USAF
- \_\_\_\_\_ Combined units would enhance responsiveness and communication in times of crisis
- \_\_\_\_\_ The benefits of a CRW have not been properly realized to justify its existence in times of reduced resources
- \_\_\_\_\_ The benefit of a professional/independent CR force outweigh any efficiencies to be gained
- \_\_\_\_\_ Having all CR units maintain a 12 hour response time (per Doc Statement) is unnecessary. Integrated and cross trained units would allow a basic 12-hr response for a certain number of units with the ability to reconstitute a deployed team within 24-48 hrs of initial CR deployment
- \_\_\_\_\_ The standalone CRW has proven its value with the reduced number of AMOW deployments, reduced likelihood for "pickup game" aerial port operations, and the recent use of airbase opening and other CR missions in the last year
- \_\_\_\_\_ Further review is required by AMC to assess the required level of CR capability. As it stands, there is uncertainty as to the required amount of CR capability, inadequate funding, and little overhead protection for manning
- \_\_\_\_\_ Managing Airmen in a more integrated organization would become almost unmanageable with different support, deploy, and mission requirements
- \_\_\_\_\_ Manning overages would have to be maintained for other organizations to "backup" the CR mission. The Air Force would not protect these overages for long
- \_\_\_\_\_ More CR capability and manning should be moved to the ARC, however, the ARC and TFI units cannot properly cover the CR mission without AD units providing support
- \_\_\_\_\_ ARC units cannot support the rapid mobility needs of the CR mission and could not properly support GAAMS/Affiliation missions. The CR mission in the ARC should not continue to grow
- \_\_\_\_\_ The AMLOs, MSAS, and AMOS do not belong in the CRW. Alternate venues such as a Mobility Advisory Group, a DRU to the EC/18 AF, and other options should be researched
- \_\_\_\_\_ MSAS units should exist in an ANG CR unit as the deployment rate is predictable, expertise and continuity are important to relationship building, and the ANG already participates in the State Partnership Program

Optional: Please enter additional comments below

11. In an attempt to summarize your opinions of this research, please use the Likert Scale provided to measure the degree to which you agree or disagree with each potential course of action.

5 = Strongly Agree  
4 = Agree  
3 = Undecided  
2 = Disagree  
1 = Strongly Disagree

- \_\_\_\_\_ The CRW should not be divested. The standalone CRW provides the best construct to solve any problems noted above while advancing the strengths
- \_\_\_\_\_ The CRW should be divested. Integrating the CRW into an AMW without personnel and equipment reductions provides the most likely opportunity for success. Though the manpower savings would not be as significant, this would protect the CR mission while offering increased efficiencies and effectiveness to both units
- \_\_\_\_\_ The CRW should be divested. Integrating the CRW into an AMW provides the most likely opportunity for success; however, the CRG should be reduced to a smaller core of trained CR Airmen and use Special Experience Identifiers and Tiered training with other AMW Airmen to realize the best organization for the Air Force
- \_\_\_\_\_ The CRW should be divested. Increasing the ARC's portion of the CR mission (to include TFI units) provides the most likely opportunity for success
- \_\_\_\_\_ The CRW should be divested. Increasing the ARC's portion of the CR mission (not including TFI units) provides the most likely opportunity for success
- \_\_\_\_\_ The CRW should be divested. Integrating the CRW into an AMOW without personnel and equipment reductions provides the most likely opportunity for success. Though the manpower savings would not be as significant, this would protect the CR mission while offering increased efficiencies and effectiveness to both units
- \_\_\_\_\_ The CRW should be divested. Integrating the CRW into an AMOW provides the most likely opportunity for success; however, the CRG should be reduced to a smaller core of trained CR Airmen and use Special Experience Identifiers and Tiered training with other AMOW Airmen to realize the best organization for the Air Force

Optional: Please enter additional comments below

## Appendix C. Round Three Questionnaire

### Questionnaire #3: Final Survey Consolidating AMC's Contingency Response Capabilities

You are receiving this questionnaire as a Contingency Response expert that responded to Questionnaire #2 of this research. *The purpose of this research is to conduct a qualitative study in an effort to evaluate the efficiency and effectiveness of the standalone CRW versus the possibility of consolidating CR units into other Air Force Wings.*

#### Background:

With the potential return of sequestration in FY16, Headquarters Air Force (HAF) and Air Mobility Command (AMC) may seek to further streamline organizations due to a reduced budget and force size. One such option is to consolidate AMC's Contingency Response Groups into existing non-CR Active Duty Wings, thus eliminating the standalone CRW. Additionally, analysis performed by the Total Force Continuum may recommend to move more CR capabilities to the Reserve or Guard Components. There may be manpower efficiencies or other mission benefits with consolidation; however, it may also be prohibitive. Please use this opportunity to define the potential intended and unintended consequences of this consolidation (to include the effects on units other than traditional CR Squadrons i.e. GSS, AMOS, or MSAS).

Your inputs will be used to form recommendations for senior leaders at AMC and HAF to shape the future construct of AMC's Contingency Response units. Your experiences are being used to analyze the current structure of the CRW during various levels of CR utilization and funding. The intent of this research is to determine the optimal and enduring structure of CR units by identifying the current strengths of and recommended improvements to the existing construct as well as analyzing potential positive and negative consequences of an alternative construct.

This research problem is broad and complex with many potential consequences. The Delphi survey methodology is an iterative communication process with subject matter experts. As a panel member, you will be given the opportunity to provide your expert opinions as well as analyze and rate a consolidated review of your fellow panel member's opinions. By combining your extensive knowledge on the CR mission and organization with the iterative methodologies found in the Delphi study, I plan to offer a concise and clear recommendation for the future organization of CR units in AMC. Thank you in advance for committing your time and efforts into providing candid responses for the benefit of the entire CR community.

#### Please note the following:

Benefits and risks: There are no personal benefits or risks for participating in this study. Your participation in this questionnaire should take less than 30 minutes per round.

Confidentiality: Questionnaire responses are confidential. Strict protocols will be maintained to ensure your identity and current unit will not be associated with your responses. Individual responses will not be publically reported. Aggregate data will be analyzed and published in the final report. Individual names and responses will be password protected at all times and will only be shared by the researcher and academic advisor as set forth by the Air Force Institute of Technology (AFIT) security protocols. At the conclusion of the study, all individual responses will be submitted to the AFIT advisor and all other copies obtained by the researcher will be destroyed.

Voluntary consent: Your participation in this study is completely voluntary. You have the right to decline to answer any question, refuse to participate, or withdraw from the panel at any time. Your decision of whether or not to participate will not result in any penalty or loss. Completion of the questionnaire implies your consent to participate.

BRAD P. BOWYER, Major, USAF  
IDE Student, Advanced Study of Air Mobility  
USAF Expeditionary Center  
JB McGuire-Dix-Lakehurst, NJ  
DSN 312-650-7320  
Cell 843-864-7657

JOSEPH R. HUSCROFT, Lieutenant Colonel, USAF  
Deputy Department Head  
Department of Operational Sciences  
Air Force Institute of Technology  
Wright-Patterson AFB, OH  
Voice: 937-255-3636 (785-3636 DSN) ext 4533

The sponsor for this research is Ms. Kimberly Corcoran, the Director of Staff of the United States Air Force Expeditionary Center at Joint Base McGuire-Dix-Lakehurst, New Jersey.

**Process:**

1. Please complete this survey **electronically** and return it as an email attachment to: [brad.bowyer@us.af.mil](mailto:brad.bowyer@us.af.mil) no later than **Friday, 24 April 2015**. If you have questions, I can be reached at CELL 843-864-7657 or via DSN 650-7320.

2. This questionnaire is an instrument of a Delphi study. The results of this questionnaire will be used to develop the follow on questionnaires approximately one month between each session. The process continues until consensus is reached or until thorough subject knowledge is attained. This questionnaire is non-attributional, so please fully elaborate on your responses. All research is intended to be completed by May 2015.

**Research questions:**

Please compare your original answers from Round 2 to the panel's responses and determine if you would like to update your response. Please use red text to identify any changes to your responses. Please use the comments to describe any discrepancies or observations as required.

1. In Round 1 of this survey, I asked the panel "what functions/duties does the 621 CRW perform well in support of the four AMC CRGs?" The panel provided the key functions/duties below. Please use the Likert Scale provided to measure the degree to which you agree or disagree with each key item.

5 = Strongly Agree  
4 = Agree  
3 = Undecided  
2 = Disagree  
1 = Strongly Disagree

Range Low	Range High	STD DEV	MEDIAN	AVERAGE
2	5	1.2	4	3.5
1	5	1.4	4	3.5
3	5	0.6	4	4.1
1	5	1.1	4	3.7
1	5	1.3	3	2.7
2	5	1.3	3	3.3
2	5	0.9	4	3.9
2	5	1.0	3	3.4
1	4	1.1	4	3.1
2	5	0.9	3	3.3
1	5	1.2	4	3.7

**The 621 CRW performs the following functions/duties well...**

- 4 Provides support for exercise planning/synchronization and other unit-level training events  
5 Synergizes unity of effort and communication between individual Active Duty (AD) CR units  
4 Expedites "shortfalls"/backfills of personnel/equipment for operational/training events  
4 Informs senior leaders with a unified voice regarding CR specific issues  
4 Compliments AMC staff-level functions to get CR issues standardized, codified, and staffed  
5 Provides focus/guidance on how to properly organize/reorganize CR units  
5 Enables appropriate levels of readiness/rapid response capabilities  
5 Evaluates mission capabilities with robust IG program  
4 Enables proper evaluation standards/processes (Stan/Eval Programs)  
3 Advances strategic-level CR mission development and maturation of CR concepts  
5 Protects CR units from the "skeletonization" of manpower/equipment ISO other in-garrison units

Optional: Please enter additional comments below

Range Low	Range High	STD DEV	MEDIAN	AVERAGE
1	11	3.5	9	7.0
1	11	3.2	5	6.1
1	11	3.0	7	5.9
1	9	2.3	4	4.3
2	10	2.4	5	5.9
1	10	2.7	5	4.7
1	9	2.7	2	3.0
2	11	2.7	9	8.4
4	11	1.9	8	7.9
2	11	3.1	4	5.5
1	11	3.5	8	7.3

2. In addition to the above Likert Scale, please rank order the 11 key items from question #1 with 1 being the most important item and 11 being the least important item.

**The 621 CRW performs the following functions/duties well...**

- 8 Provides support for exercise planning/synchronization and other unit-level training events  
3 Synergizes unity of effort and communication between individual Active Duty (AD) CR units  
7 Expedites "shortfalls"/backfills of personnel/equipment for operational/training events  
1 Informs senior leaders with a unified voice regarding CR specific issues  
9 Compliments AMC staff-level functions to get CR issues standardized, codified, and staffed  
6 Provides focus/guidance on how to properly organize/reorganize CR units  
5 Enables appropriate levels of readiness/rapid response capabilities  
11 Evaluates mission capabilities with robust IG program  
10 Enables proper evaluation standards/processes (Stan/Eval Programs)  
4 Advances strategic-level CR mission development and maturation of CR concepts  
2 Protects CR units from the "skeletonization" of manpower/equipment ISO other in-garrison units

Optional: Please enter additional comments below

3. In Round 1 of this survey, I asked the panel “what functions/duties could the 621 CRW **perform better in support** of the four AMC CRGs”. The panel provided the key functions/duties below. Please use the Likert Scale provided to measure the degree to which you agree or disagree with each key item.

5 = Strongly Agree  
4 = Agree  
3 = Undecided  
2 = Disagree  
1 = Strongly Disagree

Range Low	Range High	STD DEV	MEDIAN	AVERAGE
2	5	0.9	4	4.1
1	5	1.4	4	3.3

**The 621 CRW could perform the following functions/duties better...**

2	5	0.9	5	4.3
1	5	1.1	5	4.4
2	5	0.9	4	4.2
1	5	1.2	4	3.9
1	5	1.1	3	3.1
2	5	1.2	3	3.5
1	5	1.3	4	3.7
2	5	0.9	3	3.6
1	5	1.4	4	3.5
1	5	1.2	4	3.9

- Coordinate robust training opportunities/venues (i.e. FEMA/NORTHCOM/COCOM exercises)
- Establish better working agreements with base partners
  - Improve aircraft access for mx/port
  - Establish MOAs for training/operational activities
  - Enhance functional training for Low Density/High Demand AFSCs (Fuels, Finance, etc.)
  - Use host wing support AFSCs vs CRW AFSCs for daily needs (JAG, Finance, Personnel, etc.)
- Enhance standardization among the CR units (training, manning, readiness, processes)
- Improve representation to HHQ for current/future resources (manpower, equipment, funding)
- Advocate for more meaningful/current policy (AFIs, reference material, checklists)
- Improve CR Marketing and Education to other COCOMs/MAJCOMs
- Improve internal mission tasking process (Wing XP/WOC Process)
- Improve administrative responsibilities (taskings, project POCs, evaluations, cross-coast coordination)
- Advocate for manning as an operational unit (crew ratio vs rated staff process and UTC manning)
- Focus on strategic staff work that will improve/support the organization vs operational issues
- Provide standardized deployment/logistics functions (equipment management/UDM functions)
- Advocate for CR-specific equipment UTCs vs seeking AF-wide consensus for UTC changes

Optional: Please enter additional comments below

Range Low	Range High	STD DEV	MEDIAN	AVERAGE
1	12	3.0	6	5.7
1	12	3.7	4	5.3

4. In addition to the above Likert Scale, please rank order the 12 key items from question #3 with 1 being the most important item and 12 being the least important item.

**The 621 CRW could perform the following functions/duties better...**

1	12	3.2	3	4.5
1	12	3.5	2	3.5
2	11	2.6	5	5.0
1	11	2.9	5	5.6
1	11	3.5	10	8.6
2	12	2.7	10	9.1
1	11	3.1	5	5.6
4	12	2.6	8	8.1
4	12	2.4	8	8.2
3	12	2.8	9	8.3

- Coordinate robust training opportunities/venues (i.e. FEMA/NORTHCOM/COCOM exercises)
- Establish better working agreements with base partners
  - Improve aircraft access for mx/port
  - Establish MOAs for training/operational activities
  - Enhance functional training for Low Density/High Demand AFSCs (Fuels, Finance, etc.)
  - Use host wing support AFSCs vs CRW AFSCs for daily needs (JAG, Finance, Personnel, etc.)
- Enhance standardization among the CR units (training, manning, readiness, processes)
- Improve representation to HHQ for current/future resources (manpower, equipment, funding)
- Advocate for more meaningful/current policy (AFIs, reference material, checklists)
- Improve CR Marketing and Education to other COCOMs/MAJCOMs
- Improve internal mission tasking process (Wing XP/WOC Process)
- Improve administrative responsibilities (taskings, project POCs, evaluations, cross-coast coordination)
- Advocate for manning as an operational unit (crew ratio vs rated staff process and UTC manning)
- Focus on strategic staff work that will improve/support the organization vs operational issues
- Provide standardized deployment/logistics functions (equipment management/UDM functions)
- Advocate for CR-specific equipment UTCs vs seeking AF-wide consensus for UTC changes

Optional: Please enter additional comments below

5. In Round 1 of this survey, I asked the panel to “list or describe the **potential positives** of divesting the CRW and incorporating the CRGs into an Airlift/Air Mobility Wing or Reserve/Guard unit to include potential associate units.” The panel provided the key items below. Please use the Likert Scale provided to measure the degree to which you agree or disagree with each key item.

**NOTE: For the sections titled “Other”, responses were only given for the AMOW so the title has been changed accordingly and all comments are directly related to positives/negatives associated with the AMOW.**

**NOTE: For consistency of voting, please assume that the Airlift/Air Mobility Wing exists at a traditional Air Force Base versus a Joint Base. This will help ensure answers assume a similar organizational structure.**

- 5 = Strongly Agree  
4 = Agree  
3 = Undecided  
2 = Disagree  
1 = Strongly Disagree

Range Low	Range High	STD DEV	MEDIAN	AVERAGE
2	5	1.0	4	4.1

**Airlift/Air Mobility Wing (Traditional Mobility Wing not a Joint Base structure) could provide these advantages:**

2	5	1.0	4	4.1	Increased pool of CR trained Airmen especially for Low Density High Demand AFSCs such as contractors, Airfield Managers, CE, etc. (Assumes policy directing some AMW assets are required to maintain a basic CR qualification similar to the FFGRL Medical Team)
2	5	1.0	4	4.3	Synergistic long-range scheduling, current operations, and operational planning
1	5	1.2	4	3.4	Improved access to mobility aircraft and synergistic training, exercise, and deployment support
1	5	1.2	4	3.7	Streamlined administrative/staff support (performance reports, taskings, discipline, PA, Protocol, JAG)
1	5	1.2	3	2.9	Improved AFSC-specific functional proficiency and increased efficiency/flexibility for both units
3	5	0.7	4	4.0	Further manpower/funding reductions by eliminating redundant positions
1	5	1.1	3	3.4	Allows AMW members to become more knowledgeable of unique CR mission set/requirements
1	5	1.2	4	3.8	Reduced seams and tensions between tenant/host wings
1	5	1.3	3	3.3	Enhanced cross-flow, career progression, and ability to develop Airmen
2	5	1.0	4	3.8	Collocated and centrally managed/maintained equipment
1	5	1.6	3	3.2	Increased expertise (CR functional SMEs) available to benefit AMW organizations (LRS, SF, CE)
					Eliminating ADCON/OPCON split between 18 AF/USAF EC would improve command & control

**Reserve/Guard Unit (Majority of CR capability to ARC, TFI, or all to ARC) could provide these advantages:**

1	5	1.3	2	2.5	Enhanced utilization, specific training, and improved relationships for HA/DR missions
1	5	1.2	2	2.3	HA/DR missions would have a high level of volunteerism due to proximity and disaster lead time
1	5	1.1	3	3.0	Increased CR mission focus as many of the non-CR in-garrison functions are not as prevalent
1	5	1.5	3	3.1	Reduced resources for initial training requirements as a result of reduced personnel turnover
1	5	1.5	4	3.5	Increased continuity and mission expertise/corporate knowledge
1	5	1.4	3	2.7	Reduced risk for posse comitatus issues and increased acceptance by state disaster entities
1	5	1.3	4	3.2	Reduced cost for day-to-day operations (smaller daily in-garrison footprint) and per person costs
1	5	1.3	3	3.1	TFI organization could balance efficiency/effectiveness trade off due to ARC and AD balance
1	4	1.1	3	3.0	Increased AD rated manning for flying units and staff positions due to AD CR force reduction
1	5	1.6	3	2.9	Reserve members could serve as training specialists/evaluators ISO AD CR during high turnover

**Air Mobility Operations Wing could provide these advantages:**

2	5	1.0	4	3.8	Improved AMC forward presence/closer to geographic need thus guaranteeing faster response time
1	5	1.3	4	3.8	Enhanced geographic focus allows more in-depth training/planning/relationship building
1	5	1.3	3	3.3	Allows current ARC units to prioritize HA/DR mission while AMOW CR units maintain global focus
2	5	1.1	4	3.5	Allows AMOW members to become more knowledgeable of CR mission set/requirements
2	5	1.2	3	3.2	Further manpower/funding reductions by eliminating redundant positions
2	5	1.0	4	3.5	Improved AFSC-specific functional proficiency and increased efficiency/flexibility for both units
2	5	1.0	4	3.5	Enhanced cross-flow, career progression, and ability to develop Airmen
1	5	1.1	3	2.9	Improved advocacy for in-garrison support

Optional: Please enter additional comments below

6. In addition to the above Likert Scale, please rank order the key items for each section from question #5 with 1 being the most important item.

Range Low	Range High	STD DEV	MEDIAN	AVERAGE
1	10	2.5	2	2.7

**The potential positives of divesting the CRW and incorporating the CRGs into an:**

**Airlift/Air Mobility Wing (Traditional Mobility Wing not a Joint Base structure): (Rank Order 1-12)**

1	7	1.8	5	4.8
1	7	1.7	2	2.8
5	12	2.0	9	9.0
1	9	2.6	6	5.0
3	12	3.1	10	8.9
3	12	2.6	9	8.8
3	12	3.1	7	7.2
2	12	2.9	5	5.3
3	11	2.5	8	8.0
2	11	3.2	8	6.7
1	12	4.0	11	8.7

Increased pool of CR trained Airmen especially for Low Density High Demand AFSCs such as contractors, Airfield Managers, CE, etc. (Assumes policy directing some AMW assets are required to maintain a basic CR qualification similar to the FFGRL Medical Team)

Synergistic long-range scheduling, current operations, and operational planning

Improved access to mobility aircraft and synergistic training, exercise, and deployment support

Streamlined administrative/staff support (performance reports, taskings, discipline, PA, Protocol, JAG)

Improved AFSC-specific functional proficiency and increased efficiency/flexibility for both units

Further manpower/funding reductions by eliminating redundant positions

Allows AMW members to become more knowledgeable of unique CR mission set/requirements

Reduced seams and tensions between tenant/host wings

Enhanced cross-flow, career progression, and ability to develop Airmen

Collocated and centrally managed/maintained equipment

Increased expertise (CR functional SMEs) available to benefit AMW organizations (LRS, SF, CE)

Eliminating ADCON/OPCON split between 18 AF/USAF EC would improve command and control

**Reserve/Guard Unit (Majority of CR capability to ARC, TFI, or all to ARC): (Rank Order 1-10)**

2	10	2.7	7	6.1
1	10	2.3	8	7.5
1	8	1.9	5	4.3
2	8	1.7	5	4.9
1	9	2.3	2	2.7
4	10	2.2	8	7.9
1	10	2.9	5	4.9
1	9	2.6	5	5.2
1	10	3.7	8	6.1
1	10	2.9	6	5.5

Enhanced utilization, specific training, and improved relationships for HA/DR missions

HA/DR missions would have a high level of volunteerism due to proximity and disaster lead time

Increased CR mission focus as many of the non-CR in-garrison functions are not as prevalent

Reduced resources for initial training requirements as a result of reduced personnel turnover

Increased continuity and mission expertise/corporate knowledge

Reduced risk for posse comitatus issues and increased acceptance by state disaster entities

Reduced cost for day-to-day operations (smaller daily in-garrison footprint) and per person costs

TFI organization could balance efficiency/effectiveness trade off due to ARC and AD balance

Increased AD rated manning for flying units and staff positions due to AD CR force reduction

Reserve members could serve as training specialists/evaluators ISO AD CR during high turnover

**Air Mobility Operations Wing: (Rank Order 1-8)**

1	8	2.6	2	3.2
1	7	1.9	2	2.7
3	8	1.8	6	5.8
2	8	1.8	6	5.7
1	8	2.5	5	4.8
1	6	1.6	4	3.5
2	8	1.8	5	5.1
1	8	2.3	5	5.2

Improved AMC forward presence/closer to geographic need thus guaranteeing faster response time

Enhanced geographic focus allows more in-depth training/planning/relationship building

Allows current ARC units to prioritize HA/DR mission while AMOW CR units maintain global focus

Allows AMOW members to become more knowledgeable of CR mission set/requirements

Further manpower/funding reductions by eliminating redundant positions

Improved AFSC-specific functional proficiency and increased efficiency/flexibility for both units

Enhanced cross-flow, career progression, and ability to develop Airmen

Improved advocacy for in-garrison support

Optional: Please enter additional comments below

7. In Round 1 of this survey, I asked the panel to “list or describe the **potential negatives** of divesting the CRW and incorporating the CRGs into an Airlift/Air Mobility Wing or Reserve/Guard unit to include potential associate units.” The panel provided the key items below. Please use the Likert Scale provided to measure the degree to which you agree or disagree with each key item.

5 = Strongly Agree  
4 = Agree  
3 = Undecided  
2 = Disagree  
1 = Strongly Disagree

Range Low	Range High	STD DEV	MEDIAN	AVERAGE
1	5	1.2	4	3.5
1	5	1.3	5	4.2
1	5	1.3	4	3.5
1	5	1.4	4	3.5
2	5	0.9	4	3.9
1	5	1.4	4	3.6
1	5	1.2	2	2.9
1	5	1.6	3	3.0
1	5	1.5	4	3.2
1	5	1.3	3	2.7
1	5	1.3	2	2.7
1	4	1.1	2	2.4

**Airlift/Air Mobility Wing (Traditional Mobility Wing not Joint Base structure) could provide these disadvantages:**

Reduced priority or availability of specialized CR training  
Reduced CR standardization due to multiple CR units spread among multiple non-CR wings  
The majority of CR member's time/training would be used to support the flying mission  
Decreased priority for funding, personnel, and resources  
Potential desertion of AMLO, MSAS, and AMOS missions  
AMW would use CR equipment for everyday missions thus reducing availability/readiness  
AMW would maintain CR equipment thus reducing CR member's equipment familiarization  
Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by AMW/CC  
AMW/CC may not have the unique perspective/knowledge required for CR operations  
Potential dissolution of AMC's PHOENIX MOBILITY PROGRAM  
Mission schizophrenia for in-garrison/CR/airlift missions may cause issues and overburden AMW/CC  
18 AF will not focus on CR mission as well as USAF EC is capable of doing (ADCON)

**Reserve/Guard Unit (Majority of CR capability to ARC, TFI, or all to ARC) could provide these disadvantages:**

2	5	1.1	5	4.2	36-hour response time/lack of robust manning would not be conducive to rapid response requirements
2	5	0.9	5	4.3	ARC units could not provide full time coverage for JTF-PO alert (JTF-PO policy changes needed)
1	5	1.0	3	3.1	Increased equipment shortfalls due to lack of preparedness/maintenance status
1	5	1.2	3	3.2	Negative impact to AD member's career progression and opportunities for success (TFI)
1	5	1.2	4	3.4	Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by ARC
1	5	1.1	4	3.4	Potential desertion of AMLO, MSAS, and AMOS missions
1	5	1.0	4	4.2	Reduced standardization between CR units
2	5	0.9	4	4.3	Robust training requirements would be hard to maintain in part-time status
1	5	1.2	4	3.7	Potential dissolution of AMC's PHOENIX MOBILITY PROGRAM
1	5	1.4	4	3.5	Reduced operational deployment duration due to return to civilian job status
2	5	1.0	4	3.9	Inability to support HHQ staff functions similar to an AD wing
2	5	1.2	3	3.7	ARC unit may drop CR mission when another mission set is offered with more political appeal

**Air Mobility Operations Wing could provide these disadvantages:**

1	5	1.4	2	2.7	Too many conflicting mission sets to properly focus on CR mission set
2	5	1.0	4	3.7	The majority of CR member's time/training would be used to support the enroute mission
1	5	1.2	3	3.0	Decreased priority for funding, personnel, and resources
1	5	1.6	2	2.8	Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by AMOW/CC
1	5	1.5	2	2.7	AMOW/CC may not have the unique perspective/knowledge required for CR operations
1	5	1.3	3	2.9	Overwhelmed AMOW/CC that is already burdened by many geographically separated units
1	4	1.1	3	2.6	Potential dissolution of AMC's PHOENIX MOBILITY PROGRAM
1	5	1.2	3	2.9	CR units would not be directly associated with flying units thus reduced access to aircraft
1	5	1.1	4	3.7	Increased cost if moved OCONUS

Optional: Please enter additional comments below

8. In addition to the above Likert Scale, please rank order the key items for each section from question #7 with 1 being the most important item.

Rank	Low	High	STD DEV	MEDIAN	AVERAGE
1	8	1.9	4	3.8	
1	12	3.7	3	4.1	
1	11	3.2	5	5.3	
1	8	1.8	5	4.9	
1	11	2.9	7	6.9	
1	9	3.0	5	4.9	
1	10	3.0	6	5.7	
2	12	3.7	5	6.0	
2	12	3.1	9	8.3	
8	12	1.2	12	11.2	
3	11	2.3	8	7.7	
3	12	2.4	10	9.3	

**The potential negatives of divesting the CRW and incorporating the CRGs into an:**

**Airlift/Air Mobility Wing (Traditional Mobility Wing not a Joint Base structure): (Rank Order 1-12)**

- Reduced priority or availability of specialized CR training
- Reduced CR standardization due to multiple CR units spread among multiple non-CR wings
- The majority of CR member's time/training would be used to support the flying mission
- Decreased priority for funding, personnel, and resources
- Potential desertion of AMLO, MSAS, and AMOS missions
- AMW would use CR equipment for everyday missions thus reducing availability/readiness
- AMW would maintain CR equipment thus reducing CR member's equipment familiarization
- Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by AMW/CC
- AMW/CC may not have the unique perspective/knowledge required for CR operations
- Potential dissolution of AMC's PHOENIX MOBILITY PROGRAM
- Mission schizophrenia for in-garrison/CR/airlift missions may cause issues and overburden AMW/CC
- 18 AF will not focus on CR mission as well as USAF EC is capable of doing (ADCON)

**Reserve/Guard Unit (Majority of CR capability to ARC, TFI, or all to ARC): (Rank Order 1-12)**

1	6	1.3	2	1.9	
1	12	3.6	2	3.5	
1	9	2.7	5	5.3	
1	11	2.8	9	7.7	
1	11	3.1	6	6.4	
1	12	3.0	7	7.4	
1	11	3.3	4	4.9	
2	8	1.7	5	5.0	
7	12	1.8	12	11.0	
4	10	2.0	8	7.4	
5	12	2.1	8	8.7	
1	12	2.9	9	8.5	

- 36-hour response time/lack of robust manning would not be conducive to rapid response requirements
- ARC units could not provide full time coverage for JTF-PO alert (JTF-PO policy changes needed)
- Increased equipment shortfalls due to lack of preparedness/maintenance status
- Negative impact to AD member's career progression and opportunities for success (TFI)
- Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by ARC
- Potential desertion of AMLO, MSAS, and AMOS missions
- Reduced standardization between CR units
- Robust training requirements would be hard to maintain in part-time status
- Potential dissolution of AMC's PHOENIX MOBILITY PROGRAM
- Reduced operational deployment duration due to return to civilian job status
- Inability to support HHQ staff functions similar to an AD wing
- ARC unit may drop CR mission when another mission set is offered with more political appeal

**Air Mobility Operations Wing: (Rank Order 1-9)**

1	9	2.0	3	3.3	
1	8	2.4	3	3.7	
1	8	2.1	3	3.0	
1	8	2.4	4	4.1	
1	9	2.2	6	6.1	
1	8	2.3	6	5.5	
3	9	1.9	9	7.9	
2	9	2.0	5	5.4	
2	9	2.3	6	6.1	

- Too many conflicting mission sets to properly focus on CR mission set
- The majority of CR member's time/training would be used to support the enroute mission
- Decreased priority for funding, personnel, and resources
- Loss of CR focus and resultant loss of AMC CR culture/identity. Reduced advocacy by AMOW/CC
- AMOW/CC may not have the unique perspective/knowledge required for CR operations
- Overwhelmed AMOW/CC that is already burdened by many geographically separated units
- Potential dissolution of AMC's PHOENIX MOBILITY PROGRAM
- CR units would not be directly associated with flying units thus reduced access to aircraft
- Increased cost if moved OCONUS

Optional: Please enter additional comments below

9. In Round 1 of this survey, I asked the panel to analyze the **effectiveness and efficiencies** of incorporating the CRGs into an existing Airlift/Air Mobility Wing or Reserve/Guard Wing. The panel provided the key items below. Please use the Likert Scale provided to measure the degree to which you agree or disagree with each key item.

5 = Strongly Agree  
 4 = Agree  
 3 = Undecided  
 2 = Disagree  
 1 = Strongly Disagree

Range Low	Range High	STD DEV	MEDIAN	AVERAGE
1	5	1.4	2	2.7
1	5	1.1	2	2.5
1	5	1.4	4	3.5
1	5	1.4	2	2.9
1	4	1.2	2	2.3

**Airlift/Air Mobility Wing (Traditional Mobility Wing not a Joint Base structure):**

Combined units could be more effective and more efficient  
 Combined units could be more effective but less efficient  
 Combined units could be less effective but more efficient  
 Combined units could be less effective and less efficient  
 Combined units would not change the effectiveness or efficiency of the organization

1	5	1.2	1	1.8
1	4	0.9	2	2.3
1	5	1.2	3	2.9
2	5	1.1	4	3.8
1	3	0.6	1	1.5

**Reserve/Guard Unit (Majority of CR capability to ARC, TFI, or all to ARC):**

Combined units could be more effective and more efficient  
 Combined units could be more effective but less efficient  
 Combined units could be less effective but more efficient  
 Combined units could be less effective and less efficient  
 Combined units would not change the effectiveness or efficiency of the organization

1	5	1.4	2	2.9
1	5	1.1	3	2.9
1	5	1.4	2	2.9
1	5	1.2	3	2.9
1	5	1.3	2	2.3

**Air Mobility Operations Wing:**

Combined units could be more effective and more efficient  
 Combined units could be more effective but less efficient  
 Combined units could be less effective but more efficient  
 Combined units could be less effective and less efficient  
 Combined units would not change the effectiveness or efficiency of the organization

Optional: Please enter additional comments below

10. Round 1 of this survey discovered many **associated issues with divesting or maintaining the CRW**. This question attempts to highlight several of the issues not captured above. Please use the Likert Scale provided to measure the degree to which you agree or disagree with each key item.

5 = Strongly Agree  
 4 = Agree  
 3 = Undecided  
 2 = Disagree  
 1 = Strongly Disagree

Range Low	Range High	STD DEV	MEDIAN	AVERAGE
1	5	1.5	2	2.5
1	5	1.1	5	4.4

**Associated issued with divesting or maintaining CRW:**

2	5	1.5	2	2.5	The current CR construct is a drain on the AMC enterprise in terms of manning/resources
1	5	1.1	5	4.4	For the CRW to remain, increased manning/resources are needed. The CRW has outdated equipment, too many broken UTCs, is not manned to cover overhead items (on loan/Wg Staff), and is not properly supported by HHQ
2	5	0.9	4	4.1	Combined units would greatly increase mission and proficiency training during dwell periods. Dwell periods are the most difficult time to justify the CRW and keep unit morale high
1	5	1.5	2	2.6	Divesting the CRW would improve synergy/capabilities of entire mobility enterprise while maintaining required CR support
1	5	1.6	4	3.5	The loss of a single CR voice (CRW/CC) to AMC would be a great loss to the CR community
2	5	0.7	4	3.9	Both standalone CRW and combined units have advantages/disadvantages that could be overcome with proper processes and HHQ staff improvements
1	5	1.5	3	3.2	The mission of the CRW is too valuable to risk by divesting CR units to other organizations
1	5	1.3	3	3.3	USTC should alter the JTF-PO alert construct thus allowing efficiencies by divesting the CRW
1	5	1.3	4	3.7	Spreading CR skills/mindset to other units has huge dividends for a more agile/smaller USAF
2	5	1.0	3	3.4	Combined units would enhance responsiveness and communication in times of crisis
1	4	1.0	2	2.3	The benefits of a CRW have not been properly realized to justify its existence in times of reduced resources
1	5	1.3	2	2.8	The benefit of a professional/independent CR force outweigh any efficiencies to be gained
3	5	0.8	4	3.9	Having all CR units maintain a 12 hour response time (per Doc Statement) is unnecessary. Integrated and cross trained units would allow a basic 12-hr response for a certain number of units with the ability to reconstitute a deployed team within 24-48 hrs of initial CR deployment
2	5	1.2	4	3.7	The standalone CRW has proven its value with the reduced number of AMOW deployments, reduced likelihood for "pickup game" aerial port operations, and the recent use of airbase opening and other CR missions in the last year
1	5	1.0	4	4.1	Further review is required by AMC to assess the required level of CR capability. As it stands, there is uncertainty as to the required amount of CR capability, inadequate funding, and little overhead protection for manning
1	5	1.2	3	3.0	Managing Airmen in a more integrated organization would become almost unmanageable with different support, deploy, and mission requirements
2	5	1.2	4	3.7	Manning overages would have to be maintained for other organizations to "backup" the CR mission. The Air Force would not protect these overages for long
1	5	1.1	2	2.5	More CR capability and manning should be moved to the ARC, however, the ARC and TFI units cannot properly cover the CR mission without AD units providing support
2	5	1.3	4	3.7	ARC units cannot support the rapid mobility needs of the CR mission and could not properly support GAAMS/Affiliation missions. The CR mission in the ARC should not continue to grow
1	5	1.5	4	3.4	The AMLOs, MSAS, and AMOS do not belong in the CRW. Alternate venues such as a Mobility Advisory Group, a DRU to the EC/18 AF, and other options should be researched
2	5	1.0	4	3.7	MSAS units should exist in an ANG CR unit as the deployment rate is predictable, expertise and continuity are important to relationship building, and the ANG already participates in the State Partnership Program

Optional: Please enter additional comments below

11. In an attempt to summarize your opinions of this research, please use the Likert Scale provided to measure the degree to which you agree or disagree with each potential course of action.

5 = Strongly Agree  
 4 = Agree  
 3 = Undecided  
 2 = Disagree  
 1 = Strongly Disagree

Range Low	Range High	STD DEV	MEDIAN	AVERAGE
1	5	1.6	4	3.5

The CRW should not be divested. The standalone CRW provides the best construct to solve any problems noted above while advancing the strengths

1	5	1.5	2	2.6
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The CRW should be divested. Integrating the CRW into an AMW without personnel and equipment reductions provides the most likely opportunity for success. Though the manpower savings would not be as significant, this would protect the CR mission while offering increased efficiencies and effectiveness to both units

1	5	1.5	4	3.2
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The CRW should be divested. Integrating the CRW into an AMW provides the most likely opportunity for success; however, the CRG should be reduced to a smaller core of trained CR Airmen and use Special Experience Identifiers and Tiered training with other AMW Airmen to realize the best organization for the Air Force

1	4	0.9	2	2.1
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The CRW should be divested. Increasing the ARC's portion of the CR mission (to include TFI units) provides the most likely opportunity for success

1	5	1.1	2	1.9
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The CRW should be divested. Increasing the ARC's portion of the CR mission (not including TFI units) provides the most likely opportunity for success

1	5	1.2	3	2.7
---	---	-----	---	-----

The CRW should be divested. Integrating the CRW into an AMOW without personnel and equipment reductions provides the most likely opportunity for success. Though the manpower savings would not be as significant, this would protect the CR mission while offering increased efficiencies and effectiveness to both units

1	5	1.2	2	2.5
---	---	-----	---	-----

The CRW should be divested. Integrating the CRW into an AMOW provides the most likely opportunity for success; however, the CRG should be reduced to a smaller core of trained CR Airmen and use Special Experience Identifiers and Tiered training with other AMOW Airmen to realize the best organization for the Air Force

Optional: Please enter additional comments below

## Appendix D. AFIT Human Subjects Exemption Approval



### DEPARTMENT OF THE AIR FORCE AIR UNIVERSITY (AETC)

6 October 2014

#### MEMORANDUM FOR AFIT IRB Reviewer

FROM: AFIT/ENS

2950 Hobson Way

Wright Patterson AFB OH 45433-7765

SUBJECT: Request for exemption from human experimentation requirements (32 CFR 219, DoDD 3216.2 and AFI 40-402) for An Investigation into Joint Base Implementation.

1. The purpose of this study is to analyze the potential effects of divesting the Air Mobility Command Contingency Response Wing and merging the Contingency Response Groups into an existing Airlift/Air Mobility Wing.
2. This request is based on the Code of Federal Regulations, title 32, part 219, section 101, paragraph (b) (2) Research activities that involve the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior unless: (i) Information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) Any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.
3. The following information is provided to show cause for such an exemption:
  - a) Equipment and facilities: No Equipment or facilities are needed for this study.
  - b) Subjects: Subjects are active/recently retired military members who are in command of or recently commanded a unit assigned to the 621 CRW, Joint Base McGuire Dix Lakehurst, NJ and Travis AFB, Ca. These members are considered "experts" with regards to contingency response forces. Total number of subjects is ~30 personnel. Inclusion criterion consist of those personnel currently in command of a squadron, group, or wing in the CRW and the most recently graduated commander at each of these levels.
  - c) Timeframe: October – June 2015
  - d) Data collected: Demographic data: Grade/Rank, AFSC, current duty position level (flight, squadron, group) and extent of contingency response experience. The research method to be used for my research will be a Delphi Method. List of questions to be administered to subjects is attached.

- e) Risks to Subjects: Risk of disclosure of individual responses. To mitigate this risk, I will not collect any personally identifiable information from subjects, only minimum demographic data to study and categorize responses with regard to experience in the Air Force.
- f) Informed consent: All subjects are self-selected to volunteer to participate in the Delphi Study. No adverse action is taken against those who choose not to participate. Subjects are made aware of the nature and purpose of the research, sponsors of the research, and disposition of the survey results. A copy of the Privacy Act Statement of 1974 is presented for their review.

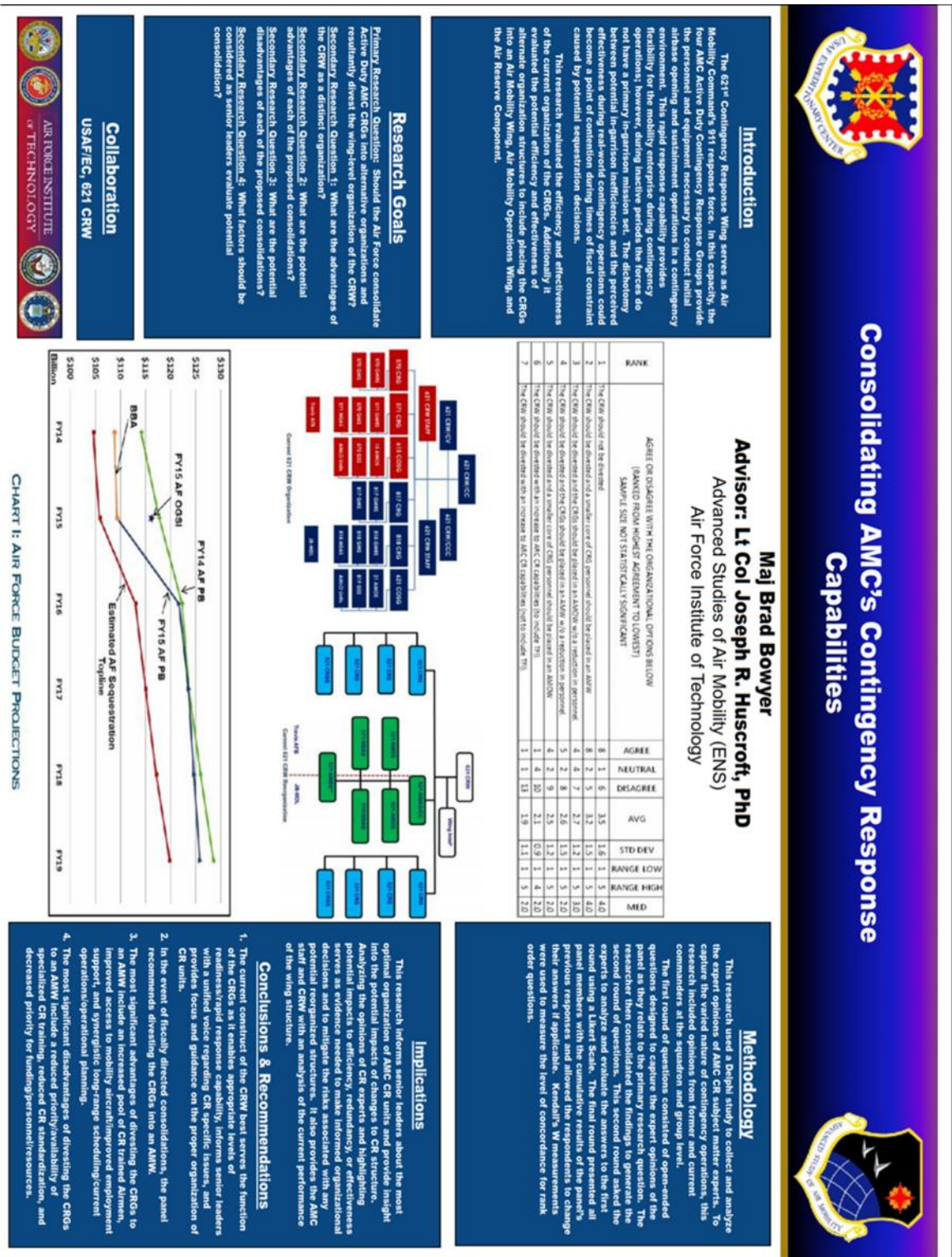
4. If you have any questions about this request, please contact LtCol Joseph Huscroft (primary investigator) – Phone 785-3636 ext. 4533; E-mail – Joseph.Huscroft@wpafb.af.mil.

LtCol Joseph Huscroft  
Principal Investigator

Attachments:

1. Survey questions

Appendix E. AFIT Quad Chart



## Bibliography

621 CRW/CCE. (2014). 621 CRW Reorganization Briefing.

Air Force Historical Research Agency. (2014, September 8). *435th Air Ground Operations Wing*. Retrieved from Air Force Historical Research Agency: <http://www.afhra.af.mil/factsheets/factsheet.asp?id=15393>

Andersen Air Force Base Public Affairs. (2014, September 8). *36th Contingency Response Group*. Retrieved from Andersen Air Force Base: <http://www.andersen.af.mil/library/factsheets/factsheet.asp?id=7068>

Bossert, P. (2002). It's Elementary: The ALCE/TALCE Concept at Work. *Airlift/Tanker Quarterly*, 6-12.

Boyd, G. (2005). *The 621st CRW History*.

Cook, G. (2002, Fall). From Global Reach Laydown to Global Mobility Task Force: The Evolution of the Air Mobility Operations Group-AMC's Rapid Response Force. *Airlift/Tanker Quarterly*, p. 27.

CRE/DO. (2015, March 1). JTF-PO Alert Launch. (B. Bowyer, Interviewer)

CRW/CCE, 6. (2014). Mission Orientation Briefing.

Delbecq, A. L., Van de Ven, A. H., & Gustafson, D. H. (1975). *Group Techniques for Program Planning: A guide to nominal group and delphi processes*. Glenview: Scott Foresman and Company.

Durham, R. M. (2014). *Alternatives to Contingency Response Group Organization: Tradeoffs to Balance Capability and Capacity*.

Floyd, B. (1994, July 21). Special Order GAXP-30. Scott Air Force Base, Illinois: Headquarters Air Mobility Command.

GMRS/CC. (2013). Background Paper on CRW Manning & Mission Analysis.

Goldfein, D. (2013, September 30). Retrieved from Joint Publication 3-17: [http://www.dtic.mil/doctrine/new\\_pubs/jp3\\_17.pdf](http://www.dtic.mil/doctrine/new_pubs/jp3_17.pdf)

- Gonzalez, G. S. (2014, November 13). *JTF-PO Leaves Liberia*. Retrieved from US Air Force Expeditionary Center:  
<http://www.expeditionarycenter.af.mil/news/story.asp?id=123431170>
- Jamieson, S. (2004). Likert Scales: How to (ab)use Them. *Medical Education*, 1212-1218.
- Ju, B., & Jin, T. (2013, September). *Information Research*. Retrieved from Incorporating nonparametric statistics into Delphi studies in library and information science:  
<http://www.informationr.net/ir/18-3/paper589.html>
- King, K. L. (2006, June 9). *JTF-PO Supplies When you need them*. Retrieved from US Transportation Command: <http://www.transcom.mil/news/read.cfm?id=6763>
- Likert, R. (1932). A Technique for the Measurement of Attitudes. *Archives of Psychology*, 1-55.
- McClave, J. T. (2011). *Statistics for Business and Economics*. Boston: Pearson Education Inc.
- Mehta, A. (2014, August 24). *Defense News*. Retrieved from USAF Chief Sees Further Integration of Guard and Active Components:  
<http://archive.defensenews.com/article/20140824/DEFREG02/308240010/USAF-Chief-Sees-Further-Integration-Guard-Active-Components>
- Schmidt, R. (1997). Managing Delphi Surveys Using Nonparametric Statistical Techniques. *Decision Science*, 763-774.
- Shrier, M. (2013, July). Contingency Response Fundamentals. Joint Base McGuire-Dix-Lakehurst, New Jersey.
- Staff, J. C. (2012). *Capstone Concept for Joint Operations: Joint Force 2020*. Washington, DC: Government Printing Office.
- Stoff, K. (2001). *Tanker Airlift Control Elements (TALCEs) and Contingency Response Units (CRUs): Does the Air Force Operational Doctrine Need to Change?* Air Force Institute of Technology.
- Turain, K. C. (2015). Director of Mobility Forces Briefing.
- United States Air Force. (2004, April). Air Force Contingency Response Group Operational Concept. p. 3.

US Transportation Command. (2014, October 17). *Transcom Widens Logistics Pipeline in Ebola Fight*. Retrieved from US Department of Defense:  
<http://www.defense.gov/news/newsarticle.aspx?id=123443>

Waters, L. T. (2012, May 30). *Air Mobility Command*. Retrieved from 615 CRW inactivates, transfers command to 621 CRW:  
<http://www.amc.af.mil/news/story.asp?id=123304038>

<b>REPORT DOCUMENTATION PAGE</b>			<i>Form Approved</i> <i>OMB No. 0704-0188</i>	
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1. REPORT DATE (DD-MM-YYYY) 19-06-2015		2. REPORT TYPE Graduate Research Paper		3. DATES COVERED (From — To) May 2014-June 2015
4. TITLE AND SUBTITLE Consolidating AMC's Contingency Response Capabilities: A Delphi Study		5a. CONTRACT NUMBER		
		5b. GRANT NUMBER		
		5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S) Bowyer, Brad, P, Maj, USAF		5d. PROJECT NUMBER		
		5e. TASK NUMBER		
		5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Air Force Institute of Technology Graduate School of Engineering and Management (AFIT/EN) 2950 Hobson Way WPAFB OH 45433-7765		8. PERFORMING ORGANIZATION REPORT NUMBER AFIT- ENS-GRP-15-J-026		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) USAF Expeditionary Center Ms. Kimberly Corcoran 5656 Texas Avenue Joint Base McGuire-Dix-Lakehurst, NJ, 08640 Kimberly.Corcoran.1@us.af.mil		10. SPONSOR/MONITOR'S ACRONYM(S) USAF EC/DS		
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution Statement A. Approved For Public Release; Distribution Is Unlimited.				
13. SUPPLEMENTARY NOTES This work is declared a work of the U.S. Government and is not subject to copyright protection in the United States.				
14. ABSTRACT This research examined the proposed divestiture of the Contingency Response Wing (CRW) and the resultant consolidation of Air Mobility Command's (AMC) Contingency Response Groups (CRGs) into either an Air Mobility Wing (AMW), the Air Reserve Component (ARC), or an Air Mobility Operations Wing (AMOW). The research used a Delphi Study of 15 Contingency Response (CR) experts. These CR experts consisted of current and former commanders at the squadron and group level. The panel provided knowledge and insight into the possible advantages and disadvantages of these potential organizational changes. This study concluded that the current construct of the CRW is the most effective organizational structure for the CRGs; however, a very clear alternative exists in the potential consolidation of the CRGs into an AMW. This organizational structure could potentially reduce the effectiveness of CR units; however, efficiencies could be gained in several key areas.				
15. SUBJECT TERMS Contingency Response Group, Contingency Response Wing, TALCE, Unit Reorganization				
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES
a. REPORT	b. ABSTRACT	c. THIS PAGE	UU	104
U	U	U		
			19a. NAME OF RESPONSIBLE PERSON Dr. Joseph Huscroft, AFIT/ENS	
			19b. TELEPHONE NUMBER (Include Area Code) (937) 255-3636 x4533 Joseph.Huscroft@afit.edu	

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